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ABSTRACT

Guidelines for the implementation of individualized education programs (IEPs) for handicapped children are provided. An introductory section details the mandates of Public Law 94-142 (the Education for All Handicapped Children Act) and defines the components of the IEP and a list of 12 exceptionalities. Section 2 discusses assessment, including areas of assessment, definitions of 60 terms, teacher competencies which aid assessment, and observation as an assessment tool. The writing of annual goals and behavioral objectives and the development of task analysis are described in the third section. The fourth section considers the criteria for the selection of educational materials and includes annotated references for approximately 30 selected materials. Planning instructional strategies, in areas such as individualizing the program and managing assignments, is the topic of the fifth section. The final section examines strategies and processes for reevaluation and provides sample checklists and examples of IEPs. Extensive appendixes include material in the areas of tests, checklists, and inventories; learning; management and behavior; parent input in the IEP process; and publishers' addresses. (PHR)

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Implementation of the Individualized Education Program

A TEACHER'S PERSPECTIVE

developed by the

Mid-East Regional Resource Center

George Washington University
Washington, D.C.

in cooperation with the

Division for Exceptional Children
North Carolina Department of Public Instruction
Raleigh, North Carolina

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Mid-East RRC
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FOREWORD

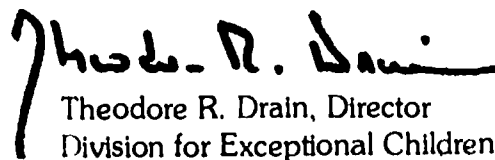
North Carolina is committed to the goal of providing full educational opportunity to all handicapped children. Children with special needs have been guaranteed the right to a free appropriate public education through state and federal legislation.

An educational program's appropriateness is determined by the degree to which it meets the requirements stipulated in the child's individualized educational program (IEP) and the extent to which it is carried out in the least restrictive environment (LRE). These two provisions which are required by Public Law 94-142 carry great import for classroom teachers. It is to that end that this document has been prepared, to assist regular as well as special education teachers with the development and subsequent implementation of individualized educational programs.

IEP development requires an understanding of data generated by assessment procedures coupled with the ability to write and sequence behavioral objectives deemed effective in attaining long-range educational goals. Program implementation demands other teacher proficiencies. Materials need to be adapted, instructional procedures modified, curriculum adjusted depending upon the type and severity of the handicapping condition. Then, too, teachers must be able to accurately evaluate student performance, to track progress with respect to specific goals. Management skills must be added to this list. Only when a child's needs dictate will he/she be removed from regular classrooms. Hence regular and special education teachers must work together, augmenting one another's programs to achieve a successful match between individual student needs and services provided.

Material contained herein is responsive to the teacher needs delineated above. Further, chapter content and sequence allows the reader flexibility. Depending on one's entry level skills, the document may be read like a text or used as a reference guide.

All who are responsible for providing educational programming to our handicapped students should find this publication a valuable resource.


Theodore R. Drain, Director
Division for Exceptional Children

PREFACE

Dear Teachers:

Before your arms are extended in despair over the planning and writing of individualized educational programs, certain assumptions should be clarified:

1. The purpose of the IEP is *not* to cause teachers to "wade through paper";
2. IEPs do *not* need to have "pages and pages of detailed writing";
3. All of the good things you have been doing for children are needed in implementing *any* program for children;
4. The IEP is not something new—it is a plan designed to fit the needs of an individual child;
5. The mere *writing* of an IEP does *not* insure successful programming.

Your task then, will be to translate information into performance objectives and program experiences which will increase the opportunity of meeting needs of children. You will then document your planning, your continual assessment of needs, the hard work of shaping behavior, and the model of self that you portray in moving exceptional children from levels of dependence to levels of independence.

It is hoped that this document will help reinforce many of the good things teachers do for children.

Good luck!



Emily Crandall

CONTENTS

	Acknowledgements	iii
	Foreword	v
	Preface	vii
Chapter 1:	INTRODUCTION	1
	Public Law 94-142	1
	The IEP in Action	2
	Various Exceptionalities (Definitions)	3
Chapter 2:	ASSESSMENT	7
	Purposes	7
	Present Performance Level	7
	Ecological Assessment	10
	Terms	11
	Teacher Competencies Which Aid Assessment	12
	Observation (References)	14
Chapter 3:	GOALS AND OBJECTIVES	16
	Writing Annual Goals (References)	16
	Writing Behavioral Objectives (References)	17
	Task Analysis (References)	24
Chapter 4:	EDUCATIONAL MEDIA AND MATERIALS	29
	Considerations for the Use of Materials	29
	Criteria for the Selection and Evaluation of Instructional Materials	30
	Selected Materials in the areas of Curriculum, Mainstreaming, and Classroom Diagnostics	33
Chapter 5:	INSTRUCTION	37
	Individualizing the Program	37
	Planning the Instructional Sequence	39
	Models of Instruction	40
	Managing Assignments and Instruction	43
	Suggestions for Teaching: Modifications	44
	General Tips for Instruction	48
	Individualizing Tips	48
Chapter 6:	REEVALUATION	52
	Schema and Strategies (for Reevaluation)	53
	Processes	54
	Checklist for Teacher Performance	55
	Sample IEP Forms	57

Appendices	A. Tests, Checklists, Inventories	51
	Diagnostic / Testing / IEP Materials	71
	B. Learning	79
	Terms Related to Learning	79
	Learning Styles	81
	Presentation Modes	83
	Styles of Learning and Behavioral Objectives	84
	C. Management / Behavior	90
	Glossary of Terms	90
	Principles of Behavior	92
	Classroom Management Tips	98
	References	100
	D. Parent Input in the IEP Process	101
	Annotated References	102
	E. Publishers' Addresses	104

CHAPTER 1

INTRODUCTION

Teachers have been assigned the task of assisting in the writing of the individualized educational program and supervising the implementation of the IEP. The general goal of this booklet is to aid the teacher in the implementation process by:

- providing an overview of P.L. 94-142;
- providing strategies and resources to aid in the assessment and evaluation process;
- providing support in programming for the IEP based on learning goals and objectives;
- correlating individualized activities, materials, and strategies to simplify the ongoing instructional program;
- providing mainstreaming strategies that are humanistic in design as well as competent in operation;
- providing organizational strategies and individualized material selections that address all-level, multi-sensory planning.

The overall goal, then, is to provide programming services to children in order to meet prescribed goals of the individualized educational program. When we talk about handicapped children we're implying a consideration for all children. All children have similar needs and develop similarly. The concept of providing adequate educational opportunities for all children means that an individual child is considered in relation to wherever he is along a continuum whatever his handicapping condition might be. An experienced teacher, Charmaine Ciardi, clarified these terms:

<i>normal</i>	what someone else decided everyone else should be
<i>handicapped</i>	what someone else decided everyone else shouldn't be
<i>special child</i>	every child I know
<i>regular education</i>	I don't know, do you?

An attempt, then, will be made to consider programming for children. The following pages will address the major points of P.L. 94-142 as well as the issues of implementing the IEP with specific concentration on the role of the classroom teacher.

PUBLIC LAW 94-142

The Education for all Handicapped Children Act has been both acclaimed and denounced for its possible impact and influence on the structure of educational systems affecting exceptional children. The law specifies certain steps and processes as now mandatory for the implementation of an individual child's instructional program. However, the exact wording of the law and regulations has caused considerable confusion for educators who, in conjunction with parents, must develop the procedures that will put "theory into practice." This law, enacted November 29, 1975, is an extension and revision of P.L. 91-230, *Education of the Handicapped Act* and P.L. 93-380, the *Education Amendments of 1974*. Public Law 94-142 can be viewed as having three main parts: 1) It is a right to education bill providing children and parents with procedural protection; 2) It is a management bill, setting forth relationships between the federal, state and local governments for the management of service delivery; and 3) It is a finance bill which provides money contingent upon the above being appropriately addressed.

P.L. 94-142 guarantees certain procedural safeguards to protect the rights of children and parents. These safeguards include:

1. *A Free Appropriate Public Education* made available to all exceptional children between the ages of 3 and 21. Priority will be given to those exceptional children receiving no education and then to the most severely impaired within each disability who are receiving an inadequate education. "Child Find" will be a part of this safeguard.
2. *Due Process* — This is a series of steps which assure the right of the parent and child to be fully informed and included in decision-making at all steps in identification, screening, evaluation, placement, instruction and reevaluation. These procedures apply in any and all decisions concerning the handicapped child's schooling and require prior consultation with the child's parents or guardian.
3. *Nondiscriminatory Testing* — This includes the assurance that special education placement will be decided on the basis of evaluation, materials and

procedures appropriate for such purposes and that no single test or procedure will be used as the sole criterion for placement. The test and other evaluation materials that are used in placing exceptional children should be administered in such a way as not to be racially or culturally discriminatory and presented in the native tongue of the child.

4. *Least Restrictive Environment* -- This provides the assurance that exceptional children will be educated with non exceptional children to the maximum extent appropriate. Exceptional children should be placed in separate or special classes or schools only when the nature or severity of the exceptionality is such that education in regular classes cannot be achieved satisfactorily.
5. *Confidentiality* -- This provides the assurance that any information contained in school records will not be released without the permission of the parent.
6. *Individualized Educational Program* -- This is a written statement that is developed by school officials, teachers, parents or guardian and the child which includes the child's present achievement level, the long and short-range annual goals, the extent of participation in regular programs, a timeline of the service provisions and a plan or schedule for checking the progress of the child and the achievements or needs for revisions.

PUBLIC LAW 94-142

Areas Addressed	How
1. Unserved and Underserved Exceptionalities	Prioritization of Free Appropriate Public Education
2. Identification Location	Child Find
3. Assessment	Non biased Appraisal
4. Placement	Least Restrictive Environment
5. Evaluation Programming	Individualized Educational Program
6. Corrective Supportive Services	Related Services Provisions
7. Timelines Schedules	Timelines Monitoring
8. Parental Rights	Confidentiality Due Process
9. Child Protection	Surrogate Parents
10. Full Service Goal	Funding Formula Personnel Development

The ultimate goal, then, is to provide a free appropriate public education to all exceptional children. With the enactment of the legislation, the approval of the final regulations and the provision of funds to state and local education agencies only a part of the planning has been addressed for an appropriate public education. Perhaps the most important area of focus is the implementation of the IEP by teacher(s) and parents.

THE IEP IN ACTION

Many teachers have been awed by the term Individualized Educational Program, the requirements of

which must be viewed on at least two levels, the administrative development plan and the individual plan which make the *Total Service Plan*.

The *Administrative Development Plan* includes procedural requirements of:

Appraisal (i.e., identification, screening, assessment, instruments/procedures, training, development, evaluation, monitoring);

IEP Development (i.e., team development, program development, specific components, monitoring, management, procedural safeguards, parental involvement);

Placement (i.e., team development, services continuum, guidelines, mainstreaming procedures, personnel development, resource coordination, community involvement, materials, facilities, special services, monitoring and evaluation);

Implementation of the IEP (i.e., planning, personnel development, related services, methodology, management, evaluation, parental involvement);

Evaluation of Child Performance (i.e., procedural safeguards, coordination of services, materials, information systems, resources, instructional media, administrative planning);

Review for IEP (i.e., procedural development, planning, guidelines, policy development revisions, training, management);

These six areas are a part of a Total Service Plan.

The *Individual Plan* for IEP implementation involves the teacher on the more specific level of daily interactions and includes objectives, strategies, procedures and activities for a Total Service Plan.

The individual plan, with which this document is concerned, offers nothing new, no magical formulas, no novel recipes, no bag of tricks, not even new terminology. It does, however, offer something competent teachers have always used -- "common sense" programming.

Fears can be replaced with confidence in knowing that kids have not undergone a metamorphosis because of the passage of a law. All of the workable theoretical designs, strategies, techniques, procedures, etc. that have proven value are still exigent, they will only be transferred from "heads to papers and forms."

COMPONENTS OF THE IEP

The first step in implementing a plan is understanding the plan. The individualized educational plan requires:

1. The Child's Present Performance Level -- which is an indication of these functions:

- cognitive
- social/emotional
- medical
- motor
- physical
- perceptual
- adaptive behavior
- language

2. *Annual Goals* -- These are general statements of expectancies based on the performance level.

prioritized needs as ascertained from assessment data, parental input, and teacher appraisal. Areas of attention and guidelines of expectations are addressed.

3. **Short-term Objectives** — These are measurable statements based on the annual goals. They are determined by diagnostic inquiries and become the major focus of implementation.
4. **Specific Educational Services** — are those services which are related to the achievement of the annual goals (without regard to availability) and are needed to meet unique needs. They include: transportation, speech, psychological services, counseling, therapy, physical education, medical services, recreation, or any other developmental, supportive or corrective service deemed necessary to implement an IEP.
5. **Extent of Regular Classroom Participation** — This is based on the principle of "normalization". The extent to which the environment is the least restrictive will determine the placement and/or participation of an atypical child in the regular setting.
6. **Projected Dates of Initiation and Duration of Services**
7. **Evaluation Criteria** — Determination of goal accomplishment is (at least) annually assessed; schedules and procedures for review are noted.
8. **Person(s) Responsible for Implementation** — This refers to those persons who will be instrumental in carrying out program responsibilities.

FLOW OF ACTIVITIES FOR AN IEP

The process of implementing an individualized educational program includes the following steps:

1. Assessment
2. Goals
3. Objectives
 - 3.1 Sequence of Skills
 - 3.2 Task Analysis
4. Instructional Media and Materials
5. Instruction
6. Review
7. Evaluation

1. **Assessment** — The initial assessment of a referred student is conducted by a team in accordance with state guidelines. This initial assessment provides information for pupil placement and subsequent instruction; however, the classroom teacher needs additional information for programming purposes and design.

The assessment section that follows will delineate tests, procedures and tips that may aid the teacher in gaining additional information.

2. **Goals** — These are defined and prioritized for identifying the instructional format and sequence. The goals describe the intent of the instructional program.

3. **Objectives** — These are measurable statements of what the student is expected to accomplish within the school year period. The objectives are related to the annual goals in that they are a specific account of the manner in which goals will be achieved.

- 3.1 **Sequence of Skills** — These are guidelines for determining the instructional procedures for achieving the objectives.

- 3.2 **Task Analysis** — This is a process through which the objectives are broken into components and developmentally sequenced according to prerequisite skills.

4. **Instructional Media/Materials** — These considerations aid in the broad range of programming in order to supplement direct teacher instruction. The selections would include: print (books, workbooks); auditory materials (tapes, cassettes, records); visual materials (films, filmstrips, slides); manipulative materials (toys, games, devices); and specialized equipment.

5. **Instruction** — This is an on-going development which includes all phases of programming in order to implement the individualized educational program. It includes cyclical assessment procedures for skill and behavioral development, identification of specific needs, teaching for re-evaluation of progress, and re-defining educational needs.

6. **Review** — On the teacher level this procedure would include an updating of the instructional plan for ascertaining student progress. The instructional plan (as outlined) can be revised to concur with prescribed needs.

7. **Evaluation** — The effectiveness of the prescribed plan is tested. Behavioral objectives are measured to ascertain achievement of goals.

The following pages will review the components of the IEP process by briefly defining each area involved and suggesting means by which the component can be implemented.

VARIOUS EXCEPTIONALITIES

Definitions of the various exceptionalities as found in *Rules Governing Programs and Services for Children with Special Needs*, Division for Exceptional Children, North Carolina Department of Public Instruction are included for your further information.

The term "children with special needs" includes, without limitation, all children who because of permanent or temporary mental, physical, or emotional handicaps need special education, are unable to have all their educational needs met in a regular class without special education or related services, or are unable to be adequately educated in the public schools. It includes those who are autistic, gifted and talented, hearing impaired, mentally handicapped, multihandicapped, orthopedically impaired, other

health impaired, pregnant, seriously emotionally handicapped, specific learning disabled, speech and/or language impaired and visually impaired. Below are definitions and special administrative information on some areas of exceptionality that require special attention.

A. Programs for The Autistic

1. *Definition:* Autism refers to a severe and chronic developmental disorder that affects communications and behavior. The essential features include disturbances of (a) developmental rates and/or sequences, (b) responses to sensory stimuli, (c) speech, language, and cognitive capacities, and (d) capacities to relate to people, events and objects. Associated features include stereotyped motor patterns and erratic expression of emotions. Nearly all will require life long assistance.

B. Programs for The Gifted and Talented

1. *Definition:* Gifted and talented students are defined as those students who (1) possess demonstrated or potential intellectual, creative or specific academic abilities and (2) need differentiated educational services beyond those being provided by the regular school program in order to realize these potentialities for self and society. A student may possess singularly or in combination these characteristics: general intellectual ability; specific academic aptitude; and creative or productive thinking abilities.
2. *Identification Standards:* Identification of students must be accomplished by multiple means. These methods include, but are not limited to, teacher, peer and/or parent nominations; assessment of intelligence, achievement, performance, and/or creativity/divergent thinking; anecdotal records; and biographical data. No child shall be denied entry into the program on the basis of only one method of identification. Consideration must be given to the total minority populations in the school in making up the racial composition of the classes. Gifted children who are handicapped are not to be discriminated against in placement.

Data on identification of gifted and talented students for placement into programs and services shall include the following:

- a. Standardized achievement or aptitude total or subtest scores.
- b. An intellectual assessment score. Individual intellectual quotient tests, such as the Stanford-Binet Form LM or the Wechsler Scales, are preferred over group tests.
- c. Superior demonstrated ability in one or more content area as indicated by grades or by demonstrated skills (products such as science projects, creative writing, etc.)

- d. Recommendations by one or more school personnel. Behavioral scales and check lists may be used.

Procedures for the Identification of Gifted and Talented Students, issued by the Division for Exceptional Children, must be used by all local educational agencies in student identification. The Student Identification Profile found in these Procedures shall be used to assess each student new to the program. A school administrative unit may, if desired, gather additional data (see Procedures from Division for Exceptional Children for specifics allowable) for assessing students who have narrowly missed the cutoff point and to insure non-discrimination. Variations from these procedures may occur if written approval is granted by the Director, Division for Exceptional Children.

C. Programs for The Hearing Impaired

1. *Definition:* Hearing impaired children are those with hearing losses which are handicapping educationally and developmentally. The term "hearing impaired" is a generic term that includes both hard of hearing and deaf children. Hard of hearing children are those whose hearing is defective but still functional, with or without a hearing aid, for the ordinary purposes of life. Deaf children are those whose hearing is not functional for the ordinary purposes of life.
2. *Identification Standards:* Children may be identified as needing audiological and otological evaluations through mass hearing screening efforts and/or teacher referral. The audiological evaluation shall include air conduction, bone conduction and impedance measurements to determine the type and extent of any hearing loss that may be present.

D. Programs for The Mentally Handicapped

1. *Definition:* Mentally handicapped refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period. The adaptive behavior refers primarily to the effectiveness of the individual in adapting to the natural and social demands of his/her environment. It has two major facets: (1) the degree to which the individual is able to function independently and (2) the degree to which he/she meets satisfactorily the culturally imposed demands of personal and social responsibility.
2. *Identification and Program Standards:* The assessment process will provide information to indicate whether the child needs a program for the mildly retarded (educable mentally handicapped),

moderately retarded (trainable mentally handicapped), or severely/profoundly mentally handicapped. The intelligence quotient range for placement in programs for the educable mentally handicapped is 50-69 plus or minus one standard error of measurement. The intelligence quotient range for placement in programs for the trainable mentally handicapped is 30-49 plus or minus one standard error of measurement. Children scoring on the borderline between the educable mentally handicapped and trainable mentally handicapped ranges should be provided services in the least restrictive appropriate environment. Children scoring below 30 on an individual psychological test may be enrolled in a class with the trainable mentally handicapped if their needs can be met appropriately in such a setting. Severely or profoundly mentally handicapped pupils who manifest severe learning and/or behavior problems, and who require extensive structure in learning situations if their educational needs are to be met, will need to be placed in a separate program.

E. Programs for The Multihandicapped

1. *Definition:* Multihandicapped students are students who have a combination of two or more handicaps (examples: mentally handicapped/emotionally handicapped, and deaf-blind) the combination of which causes such developmental and educational problems that the children cannot be properly accommodated in special programs that primarily serve one area of handicapping condition. Children who are severely multihandicapped have serious primary disabilities that are cognitive and/or behavioral and require significantly more resources than are provided for less handicapped children.
2. *Identification Standards:* Multi-handicapped and severely/profoundly mentally retarded children have a wide variety of handicapping conditions and their associated characteristics require diverse and unique evaluation procedures. Comprehensive evaluation data must include:
 - a. medical evaluation with information on precautions, medications and recommendations for physical and occupational therapy;
 - b. education evaluations that address self-help, cognitive, social, and where appropriate, pre vocational skills;
 - c. psychological evaluation that includes intellectual functioning, personality, social and adaptive behavior;
 - d. psychomotor evaluation giving information on the neurological and physiological dysfunctions; and
 - e. communication evaluation with information on expressive and receptive speech and language

skills, with particular attention given to the need for augmentative communication systems.

F. Programs for The Orthopedically Impaired

1. *Definition:* An orthopedically impaired child possesses a severe orthopedic impairment which adversely affects his/her educational performance. The term includes impairments caused by congenital anomalies.

G. Program for Other Health Impaired

1. *Definition:* Other health impaired refers to chronic or acute health problems such as heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, diabetes, genetic impairment's, or some other illness which may cause a student have limited strength, vitality or alertness to such an extent that special educational services are necessary.

H. Programs for Pregnant School Girls

1. *Definition:* Pregnant students with special educational needs are those who because of their pregnancy, require special education and/or related services other than that which can be provided through regular education services.

I. Programs for The Seriously Emotionally Handicapped

1. *Definition:* A serious emotional handicap in children is defined as behavior that is developmentally inappropriate or inadequate in educational settings as indicated by one or more of the following characteristics: (1) an inability to learn that cannot be explained by intellectual, sensory, neurophysical or general health factors; (2) an inability to build or maintain satisfactory interpersonal relationships with peers or teachers; (3) inappropriate or immature types of behavior or feelings under normal conditions; (4) a general pervasive mood of unhappiness or depression; (5) a tendency to develop physical symptoms, pains or fears associated with personal or school problems. The behavior must be of sufficient duration, frequency and intensity to call attention to the need for intervention on behalf of the child to insure his/her educational success. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally handicapped. For purposes of classification and educational programming, children diagnosed as autistic are considered seriously emotionally handicapped.

J. Programs for Specific Learning Disabilities

1. *Definition:* Pupils who exhibit a specific learning disability have at least average intellectual ability or

are capable of average intellectual ability. These pupils manifest a significant discrepancy between their current educational placement and their performance. This discrepancy is the result of a deficiency in prerequisite skills and/or performance necessary in the academic areas of reading, spelling, mathematics or handwriting. These deficiencies cannot be attributed to the presence of visual, auditory, or motor handicapping conditions, primary emotional disturbance, cultural, environmental, or economic disadvantage.

2. **Identification Standards:** The level of intelligence should be determined by an appropriate individually administered intelligence test. On any of the Wechsler Scales, the student should attain either a verbal, performance, or full scale IQ of 90 or above within one standard error of measurement for a particular age group. Thus an IQ of 85 or higher will be acceptable on any of the Wechsler Scales—verbal, performance, or full scale. On the Stanford-Binet, the student should attain a score of 85 or above, within one standard error of measurement. A pupil considered to be capable of average intellectual functioning must exhibit the following pattern of individual intelligence test scores. The individual's scaled score scatter must include at least two Wechsler subtest scores of 9 or higher on either the Verbal or Performance Scales. Particular attention should be paid to the following subtests as strong indicators of potential average functioning: Similarities, Vocabulary, Block, Design, and Object Assembly.

Specific learning disability pupils must exhibit a significant discrepancy in achievement in comparison to current educational placement. This discrepancy must be of sufficient magnitude to suggest moderate to severe learning disabilities in any one or combination of the essential prerequisite skills or academic areas.

3. **An Alternative to a Psychological Evaluation:** The standard of the Specific Learning Disability Program is to obtain an appropriate psychological evaluation prior to every placement for a pupil with specific learning disabilities. However, due to the lack of numbers of qualified psychologists this goal cannot be fully met at this time.

Standards and guidelines for the psychological alternative are available from the Division for Exceptional Children. Local education agencies who wish to utilize the psychological alternative must

receive written approval from the Director, Division for Exceptional Children.

K. Programs for The Speech and Language Impaired

1. **Definition:** Children who are speech and/or language impaired are those who evidence (1) defective production of phonemes (speech sounds) that interfere with readily intelligible speech; (2) abnormality in pitch, loudness or quality resulting from pathological conditions or inappropriate use of the vocal mechanism that interferes with communication or produces maladjustment; (3) disruptions in the normal flow of verbal expression that occur frequently, or are markedly noticeable and are not readily controllable by the pupil; (4) disability in verbal learning (language disorders) resulting in a markedly impaired ability to acquire, use or comprehend spoken or written language where no significant degree of sensory or motor incapacity, mental retardation, emotional handicap or environmental disadvantage is present as the primary disabling condition and (5) delayed language acquisition resulting from sensory or motor incapacity, mental retardation, emotional handicap or environmental disadvantage.
2. **Identification Standards:** Children may be identified as needing speech-language evaluations through mass screening efforts and/or teacher referral. Children determined through screening or referral to need evaluations shall be assessed in the areas of phonology (speech sounds), language (syntax, morphology, semantics), voice and fluency. It is on the basis of such an evaluation that the determination as to the type and intensity of services is to be made.

L. Programs for The Visually Impaired

1. **Definition:** Functionally blind children are those who have so little remaining vision that they must use Braille as their reading medium. Partially seeing children are those who have a loss of vision, but are able to use regular or large type as their reading medium. These will generally be children who have a visual acuity between 20/70 and 20/200 in the better eye after correction. Children who are legally blind are those who have a visual acuity of 20/200 or less in the better eye after correction or a peripheral field so contracted that the widest diameter subtends an arc no greater than 20 degrees.

CHAPTER 2

ASSESSMENT

Assessment, as it is used in this book, includes Identification, Screening and Evaluation. It includes as well the ongoing, informal assessment utilized by the classroom teacher to monitor and Reevaluate the progress of the child and the effectiveness of the I.E.P.

ASSESSMENT PURPOSES

1. To analyze and interpret academic, social, physical, and environmental strengths and weaknesses;
— *Not to report isolated scores or findings;*
2. To provide a framework for individualized planning relative to writing annual goals;
— *Not to provide information to "Fill-In" the IEP forms;*
3. To provide a continual mechanism for planning instructional strategies;
— *Not to provide a rigid stationary diagnosis which is not subject to change;*
4. To aid in providing placement that will promote child growth;
— *Not to "Pin a label" for federal dollars;*
5. To provide remediation information for programming purposes, the "What to do";
— *Not to gather etiological data or list teaching techniques;*
6. To relate information on intra/inter individual differences;
— *Not to compare children to each other for the attainment of unrealistic goals;*
7. To provide as much information to the teacher as may be available. This will assist her evaluation of her efforts;
— *Not to verify or validate the teacher's accountability;*
8. To provide more than a cursory "Look" at a child's total being.

- *Not to exclude highly trained educators, psychologists and other specialists in the diagnostic process.*

PRESENT PERFORMANCE LEVEL AND THE ASSESSMENT PROCESS

The task of ascertaining the *present level of performance* is one in which knowledge of a child's developmental, functional and attainment level is extracted for placement and programming information. Knowledge of the performance level aids in determining what is *known* and what is needed to promote growth (where the child is and where she /he can be taken). The behavioral objectives section discusses "what is needed to get him/her there"

Information relevant to present performance level can be ascertained from previous data that may be found in the cumulative folder (and/or other information sources). This data will aid in determining *what is known* and *what additional information is needed*. New information can be determined from tests, assessment data, observations, interviews, etc.

Previous data may be elicited from:

- school record /anecdotal records
- psychological reports
- developmental history /scales
- educational specialists reports
- language /speech evaluations
- previous teacher interviews
- conferences with previous student contacts (i.e., principal, nurse, counselor, parents, referring teacher)
- behavioral evaluations

In order to diagnose and prescribe for "what is needed" a comprehensive assessment of the following areas is necessary:

- educational
- physical and emotional strengths and weaknesses
- general achievement for estimating growth, assessing strengths and weaknesses and level of achievement

These areas can be further delineated:

- educational progress in specific areas
- achievement in subject areas
- learning /cognitive style
- social /adaptive behavior
- emotional predisposition
- psychological status
- medical assessment
- physical assessment
- motor /perceptual-motor
- general cognitive assessment
- language assessment

In order to establish the present performance level a complete assessment of the child's abilities and disabilities is necessary.

Assessment must refer to the exceptional child's problems in a way that has direct implications for the prescription of possible remediation strategies. The ultimate goal of assessment is to bring a child from a level of dependence to a level of independence.

The evaluator engages in assessment in order to determine certain capabilities of an individual without prejudging the individual based on the category assigned to him/her by virtue of an apparent deficit or dysfunction. The intent is to know more than a label.

- (1) Where is the present functioning level?
- (2) What will be the objective?
- (3) How will the objectives be met?

These questions aid in pinpointing the effect of the child's impairment and in designating appropriate approaches for amelioration. The behavior that impedes development is identified and other behaviors are activated that accelerate growth.

Differentiation has been made between testing and assessment. Testing refers to the exposure of an individual to a predetermined device in order to measure/analyze/diagnose the skill, knowledge, intelligence, capacities, aptitudes or any other characterization for factual identification. Assessment, however, refers to the analyzation and compilation of test results into some conclusion for prescription and amelioration. It is, then, an evaluative appraisal of a child's general performance.

Donald Cross at the University of Kentucky has succinctly grouped the purposes of assessment as:

- *administrative* — usually for recording or comparative purposes;
- *diagnostic* — this categorization sometimes assists in placement but does not specify performance levels or how to teach skills to the child;
- *placement* — used as an aid for appropriate grouping, retention and promotion;
- *statistical* — the gathering of data for administrators, superintendents, principals, supervisors, etc. for a variety of functions (i.e., meeting guidelines, funding, tax purposes).

- *child find* — (most critical) the gathering of information for child-use:
 - analyzation of strengths and weaknesses;
 - implications for educational programming;
 - strategies for remediation;
 - knowledge in specific areas;
 - learning styles;
 - plan for individualization;
- *orientation to tasks* — tests for specific identifiers of strengths and weaknesses revealed in a functional breakdown (e.g., tasks related to areas to be tested);
- *task analyzation* — a determination of sequential, instructional programming, materials and strategies needed for success.

This information relates to the assumption that assessment does not cease with the establishment of the present performance level; continual, on-going purposes are established and a vehicle for program improvement is initiated.

Additional purposes for assessment have been cited by John Salvia and James Ysseldyke in *Assessment in Special and Remedial Education*:

- (generally) the provision of information to assist in making decisions regarding educational development;
- identification of significant differences (positively or negatively) through screening;
- placement;
- program planning to help in deciding what and how to teach groups and individuals. It is also an aid in individualization;
- program evaluation (rather than the student) is compared for effectiveness;
- monitoring of the individual progress of students is used as an indicator of growth or non-growth.

The purposes and/or uses of assessment data are dependent upon the specific communication needs. If there are non inherent "messages" in the information obtained, there has been time wasted in the acquisition of the information.

There is a need for:

- a thorough knowledge of the child's current intellectual and adaptive behaviors;
- the conditions under which and situations in which these behaviors are demonstrated;
- the responses the child has learned up to current point;
- the responses the child is capable of making either through maturational training or changes in his milieu;
- knowledge of what prevents the child from achieving tasks (i.e., sensory or physical limitations).

Other purposes of assessments may include:

- qualifiable and quantifiable scores which can aid in meaningful programming;
- remediation information for prescriptive references;
- information regarding developmental levels of individual skills;
- information regarding descriptors of behavioral patterns;
- knowledge of skills which may be generalizable to several curricular areas;
- guide for evaluation planning;
- satisfaction of IEP requirements.

Some suggested areas of assessment might include:

1. *Educational Assessment*

academic skills (general)

strength areas

weak areas

style of learning

- modality (ies)
- attention levels
- motivators/reinforcers
- learning environment
- typical assignments
- productive levels
- feedback mechanism

vocational skill level

2. *Cognitive Development*

intelligence level

discrimination

general information

vocabulary development

comprehension/sequencing

relationships

abstractions

perception tests

- auditory
- tactile
- visual

problem solving

3. *Language Assessment*

receptive/expressive level

gestures/non-verbal responses

dominant language

4. *Behavioral/Social/Emotional Assessment*

behavioral observation

- occurrence (when)
- duration
- frequency
- environment (where)

self-concept

self-help skills

interpersonal skills

adaptive behavior

- school

- interpersonal relations

- self-help

attitude and feelings/affective areas

development sequence (psychological /physical)

value system

5. *Physical Development*

psychomotor (general)

gross/fine motor

sensory impairments

physical impairments

health related behaviors

general health (medical)

general vision, hearing, speech

If we believe assessment to be a continual process for ascertaining needs and programming for the amelioration of problems, it becomes incumbent upon us to use effective, dynamic techniques in gathering information, observing performances, recording findings and programming based on our findings. One method for gathering this information is through the use of tests.

Certain information must be obtained from any test. The reason for choosing one test over another depends upon the kinds of behavior sampled by a specific instrument (i.e., recall, recognition, drawing, pointing, etc.). Another reason might be the ease of error analysis (i.e., consistency of failure, kinds of items failed, patterns). We seek to extract information that will reveal learning characteristics, levels of functioning, modality preferences, etc. or just the confirmation of the existence of a problem. Once a problem is identified and delineated or areas of weaknesses are diagnosed, specific findings are interpreted based on the amassed information. After the extraction of assessment information, the data must be compiled into usable form. Needed skills should be prioritized and goals and objectives written.

Three criteria for diagnosing difficulties are: 1) how much a child can learn; 2) the circumstances under which a child can learn; and 3) the materials needed for learning. Environmental variables and task requirements are included in these criteria.

A systematic/organizational schema might be devised to aid or define the parameters of what should be involved in the assessment process. Rather than develop one model as opposed to another a brief description of currently used models will be delineated.

DIAGNOSTIC-PRESCRIPTIVE TEACHING

The diagnostic-prescriptive teaching model is a model which is based on the assumption that children who are experiencing learning difficulties can be diagnosed to determine their strengths and weaknesses and intervention techniques can be prescribed (i.e., goals, methods, strategies, materials, etc.) based on a specific diagnosis. The process involves the establishment of objectives (behaviors to be assessed and developed); a diagnosis of

objectives attained; the writing of a *prescription* based on student capabilities; and a *criterion measurement* for objective attainment.

Two assessment models utilize the diagnostic-prescriptive philosophy, the ability-training model and the task analysis model.

The ability-training model's primary purpose is to identify those components in the diagnostic process (i.e., strengths, abilities, etc.) in order to intervene, compensate or remediate based on the gathered data in the psychomotor, cognitive, psycholinguistic, or perceptual areas.

Task analysis models use a behavioral approach and require the assessment of observable skills and behaviors. Complex instructional goals are task analyzed (broken into subskills) and specific skills that are components of the goals are identified as intervention strategies. The intent of the task analysis is to identify "skill-development" weaknesses and design interventions to remediate the weaknesses.

DIAGNOSTIC-REMEDIAL PROCESS

B. Bateman has outlined several principles involved in programming for specific learners:

- the determination of the existence of a problem;
- a description of the problem;
- an analysis of the problem;
- a formulation of the educational hypothesis.

ECOLOGICAL ASSESSMENT

There are inherent weaknesses in both systems; however there are strengths which can be extracted. Ronald Eaves and Phillip McLaughlin have pinpointed some of the weaknesses in the two models and proposes a systematic assessment approach which sorts the many attributes, strengths, skills and weaknesses of the child and his environment into a broadbased clinical assessment. This approach assesses the child and environmental data.

Eaves and McLaughlin propose seven methods that can be used by assessors to collect information about a child and his environment.

1. *Inspection of Previously Collected Data* — using the school files/records for information.
2. *Informal Consultation* — an unstructured information-gathering procedure used to find out information not previously known from resources.
3. *Structured Interviews* — requires advanced planning of purposes and interview guidelines. Information about areas of difficulty and previously gathered data
4. *Screening Devices* — these can be in the form of questionnaires, rating scales, inventories, checklists, etc.
5. *Standardized Tests* — provides samples of the child's behavior for comparative measures and further inquiry.

6. *Non-standardized Tests* — similar to standardized test with the exception of the use of normative data for comparative purposes and validity and/or reliability questionable.
7. *Observation* — a sampling of behavior based on spontaneous observances in the natural environment.

Other proponents of the ecological approach cite the fact that the environmental learner affects and is affected by his environment. Information can be extracted by observing or collecting data through:

- initial descriptive information
- teacher expectancy
- behavioral descriptions
 - present data
 - past data
 - environmental descriptions

An assessment, then, provides some of the information needed to determine what and how to teach a student. After the data is collected, a determination of the student's needs are decided. Realistic goals are written and sequenced, followed by the writing of short-term objectives.

INTER-INDIVIDUAL DIFFERENCES/COMPARISONS

Results of a group test, such as the Stanford Achievement, give information about how the performance of an individual, class or group compares to some ideal peer performance. This peer performance, the comparative point of reference, delineates the *interindividual* differences/comparisons between an individual, group or class. *Inter* refers to a comparison between groups and test

Some methods by which *inter-individual* differences may be assessed include:

- Standardized tests
- Achievement tests
- Developmental scales
- Formal tests
- Intelligence test
- Norm-referenced tests
- Teacher made tests
- Developmental tests (screening)

INTRA-INDIVIDUAL DIFFERENCES/COMPARISONS

Looking only at the individual and making comparisons based upon some expected performance of that individual, is an *intraindividual* difference or comparison. *Intra* refers to the differences within an individual or within a specific test. The comparison/differences are relative only to that individual. Self being the comparative point of reference, peer performance is not considered. This method of comparison is widely used in special education.

Some methods by which *intra-individual* differences may be assessed include:

- Diagnostic tests
- Informal tests
- Interviews
- Inventories
- Observations
- Questionnaires
- Rating scales
- Checklists
- Teacher made tests

ASSESSMENT TERMS

1. *Achievement Test* — A test which measures what and/or the amount a student has learned.
2. *Assessment* — Includes information gathered under Identification, Sweep Screening, Screening, Evaluation and ongoing classroom assessment.
3. *Basal* — Relating to the point or level at which the subject is assumed to have achieved knowledge or skills below that level or that level prior to the first error, mistake, failure.
4. *Ceiling* — That level at which an individual can no longer make correct responses or progress. It is assumed that no correct responses will occur beyond that point or level.
5. *Chronological Age* — Refers to the actual birth age in years and months.
6. *Construct Validity* — The extent to which a test measures the trait or variable for which it was designed.
7. *Content Validity* — Indicates the extent to which a test covers (sufficiently) a representative sample of the behavior for which it was designed.
8. *Correlation* — The degree to which a relationship exists between structures, characteristics, processes, scores, or different sets of scores.
9. *Criterion* — A standard upon which a judgement of decision may be based; a level of performance.
10. *Criterion-References* — The measurement of a specific standard set of skills relative to specific objectives.
11. *Criterion-Referenced Tests* — A test which measures skills relative to specific objectives. These tests relate to component tasks required or identified with a specific objective. They yield information about task deficiencies, thus comparing a child to his own potentialities.
12. *Developmental Scales* — Presentation of a series of sequenced items or tasks which represent levels of skill acquisition which are arranged in the order of acquisition.
13. *Diagnosis* — An investigation or analysis of the cause or nature of a condition, situation or problem.
14. *Diagnostic Tests* — A test which identifies or distinguishes problems or patterns of errors. Provides in depth a measure of skills and abilities that lead toward remediation.
16. *Educational Objectives* — (Same as instructional, behavioral objective) A statement describing the intent of learning, the behavior the learner will exhibit upon completion of the learning, the conditions under which the learning will occur, and the criterion for measuring the mastery of the instruction.
17. *Equivalent Form* — A substituted test which has similar format, content, level of difficulty, and scoring interpretation.
18. *Evaluation* — The gathering and analyzation of factual information of test results concerning abilities, characteristics, and other variables which lead to a diagnosis, conclusion, and/or remediation.
19. *Exit Level* — The point at which representative skills have been acquired.
20. *Formal Assessment* — A highly structured process whereby formal/standardized tests are used in the appraisal of skill acquisition or to ascertain pupil progress.
21. *Formal Tests* — Those tests which are standardized and administered in a specified manner, procedures for administering, scoring, and interpreting results are detailed and are the same regardless of the tester (to retain validity and reliability).
22. *Frustration Level* — That level of skill development (reading) at which a child is performing with 75% mastery. Difficulty is usually apparent.
23. *Grade Expectancy* — The expected academic grade level based on a chronological age.
24. *In-Depth Testing* — More than a screening or peripheral testing. Strengths, weaknesses, styles, etc., are ascertained determining the existence of a problem.
25. *Informal Testing* — An unstructured testing which does not use standardized tests; use of standardized test within rules, directions and guidelines for administration are modified; teacher-made tests designed to assess specific skills.
26. *Intelligence Quotient* — A numerical measure of mental or intellectual development. The intelligence quotient is computed by using ratio of the mental age divided by the chronological age, multiplied by 100. $IQ = MA/CA \times 100$.
27. *Intelligence Test* — A test designed to measure mental capacity or one's ability to learn.
28. *Inter-individual* — A comparison between groups or tests to some average performance; comparison of one to peers (as a reference point).
29. *Interview Techniques* — A formal or informal consultation to evaluate aptitude or progress of a student.
30. *Intra-individual* — Concept of comparing a person to himself within an individual or within a specific test relative to the individual (self is the reference point). Peers are not compared.

31. *Inventory* — A screening or noting of skills a child possesses.
32. *Item Analysis* — The analyzation of individual items from assessment devices /tests; a noting of items passed/failed, and the abilities measured.
33. *Language Age* — An assessment of the development level of language skills or age functioning of language abilities.
34. *Mastery Scale* — An equal interval scale reflecting changes in task proficiency.
35. *Mastery Test* — A test that aids in determining the extent to which a skill, concept, etc., has been mastered.
36. *Mean* — A statistical term representing an average of all scores obtained from a given population. It is obtained by adding quantities together and dividing by their number.
37. *Median* — The middle score in a set of ranked scores; the middle number in a given series, an even number lie above and below the median.
38. *Mental Age* — The level of intellectual functioning or development expressed in equivalents of age (chronological); an expected intellectual functioning age.
39. *Modality* — The preferred manner of receiving sensory stimulation (i.e., tactile, auditory, visual).
40. *Mode* — That score that occurs most frequently in a specific distribution.
41. *Non-Standardized Test* — A test using an unstructured method of administration.
42. *Norm* — An authoritative, average or designated standard of typical/specific performance of a given population.
43. *Norm-reference Test* — A test which compares one to a given population; a test whose items are predetermined to be within the capabilities of a majority.
44. *Observation* — A structured or unstructured assessment/testing technique that attends to visually noticing a child, extracting information based on observing certain characteristics or behaviors and recording the information to aid in programming.
45. *Percentile* — A statistical term which is an indication of any of the points dividing a range of data into 100 equal intervals and indicating the percentage of a distribution falling below or equal to it; number or percentage of children with the same or lower scores on a test instrument.
46. *Pre-test* — A test designed to measure the level of function or knowledge and skills given before a program is implemented. A post-test is given after implementation.
47. *Profile* — A numerical or graphic depiction of abilities, achievement which can be expressed in scores, equivalent scores, developmental or academic ages.
48. *Program Evaluation* — An examination, judgement, or description of the effectiveness of a given objective, program, idea, etc.
49. *Questionnaire* — An assessment techniques which uses a systematic series of questions prepared to gather information for analysis.
50. *Random Sample* — A chance or representative selection from a large population in which each member of the population has an equal opportunity for selection.
51. *Rating Scale* — A scale with a grading or rank which elicits information and classifies it in some order.
52. *Raw Score* — The number of correct responses; usually, the first score from initial scoring.
53. *Reliability* — The degree of stability and the yielding of the same results over time; the yielding of the same test score given two testing administrations.
54. *Scaled Scores* — A means of converting raw scores from different tests into a distribution of scores for direct comparison.
55. *Social Age* — A term used in social devices to give comparative mental ages.
56. *Standard Error of Measurement* — A measure of the amount of error to be expected in a given score. The smaller the standard error, the greater the accuracy of the test scores.
57. *Standard Deviation* — A statistical concept that is a measure of the variability of the scores in a distribution.
58. *Standardized Test* — A test which is administered with pre-determinants. Specific requirements for administration are included.
59. *Validity* — The ability of a test to measure what it purports to measure.
60. *Variance* — The extent of deviation from the mean.

ASSESSMENT COMPETENCIES

The following statements emphasize the diverse skills which would aid the teacher in assessing for programmatic purposes. No single person is expected to be proficient in all areas.

1. Ability to compare content and intent of formal and informal tests.
2. Proficiency in the administration of specific test instruments for a given population.
3. Proficiency in the use of informal techniques which reflect intent of standardized measures for use in writing specific behavioral objectives.
4. Skill in designing and structuring operational objectives based on the translation of assessment data.
5. Proficiency in interpreting/structuring plans based on various assessment techniques represented by various models.
standardized test
criterion referenced tests
physical/organic tests
developmental tests

6. Proficiency in the identification of appropriate instruments specific to a given discipline for singular or interdisciplinary models.
7. Skill in interpreting dynamic information relating to logistical considerations for assessment.
8. Proficiency in ascertaining progress in educational skill areas and in assessing strengths and weaknesses.
9. Proficiency in the identification of behavioral characteristics of a specific population.
10. Proficiency in determining learning styles for programmatic considerations.
11. Skill in the use of periodic review for determining progressive systematic recording for growth.
12. Consideration of the dynamic information included in the appraisal process and techniques for "working through" behaviors that give distorted profiles (i.e., attention spans, conflicts, distractibility, withdrawal, etc.)
13. Consideration of ecological factors for appraisal process.
14. Skill in the use of task analysis for sequencing skills and providing test items matched with specific tasks.
15. Skill in the use of the following informal strategies to extract pertinent information:
 - interviews
 - rating scales
 - developmental scales
 - anecdotal records
 - informal diagnostic inventories
 - informal tests
 - teacher-made tests
 - parental interviews
 - observation
 - cumulative records
 - questionnaires
 - checklists
 - language samples
 - inventories

SYNTHESIZING INFORMATION FROM ASSESSMENT DATA

Some general questions arise related to programmatic considerations after a child has been assessed. Much of the information extracted by the medical profession, therapists, audiologists, psychologists, motor specialists, etc., has implications for the classroom teacher.

Information provided by these sources may vary in the direct impact on the child in the classroom, and the resulting adjustments that would be required in the instructional program. Following is a list of certain considerations which may prove useful to you as a teacher of an exceptional child:

- treatable problems caused by medical aberrations;
- physical problems which could be corrected by specific appliances (e.g., hearing aid, glasses);
- medical causes for behavioral problems;
- specific management problems that may contribute to medical difficulties and possible strategies to ensue;
- necessary restrictions involving play activities;
- specific management or programming techniques required for certain medical observations;
- learning problems that may be expected from medications;
- specialized disciplinary techniques needed to change behavior problems;
- emotional states that contribute to medical problems;
- predictors of articulation skills, stuttering, language development, voice disorders, aphasia, etc.;
- diagnostic processes fundamental to communication disorders;
- conditions which maintain undesirable behaviors;
- functional relationships leading to effective treatment;
- description of specific reinforcers;
- precautions necessary in movement;
- independent head control and adequate eye contact for use of educational materials; level of presentation;
- balance and use of limbs;
- necessary positioning adaptations;
- adaptive equipment that might be needed;
- activities that could worsen condition, precautions to consider;
- activities that could strengthen physical condition;
- programmatic adaptations needed;
- resources necessary to facilitate learning and adjustment;
- major programmatic strengths;
- environmental changes needed for program adjustment;
- deficit areas for considerations;
- implications for curricular adjustments;
- other services that might facilitate growth;
- immediate training recommendations;
- degree of hearing loss and environmental adaptations necessary;
- effect of hearing loss on programming considerations;
- appropriate follow-up procedures needed;
- type of classroom to be considered appropriate for mainstreaming considerations;
- effect on speech and/or language development.

Informal assessment procedures provide the teacher with specific information and indications of functioning levels, learning styles, social behaviors, learning processes, preferred motivational strategies, and programming paths. There are many advantages that can be extracted from informal assessment data:

- allows for programming strategies to be instituted;
- weaknesses and strengths can be pinpointed more accurately;

- practical information is extracted;
- formal tests can be complemented;
- can take less time than preparing for formal tests;
- allows the teacher to see the student in a variety of situations;
- points to the need for an understanding of learning sequences;
- quick intervention can occur from the informal data.

The following strategies can be used to extract data that will be invaluable for writing goals and objectives for the IEP. These strategies may also be used as a means of providing continuous programming information and amending the IEP accordingly:

- parental input
- anecdotal records
- autobiographies, biographies
- cumulative records
- observations
 - unstructured
 - semi-structured
 - highly structured
- conferences
- checklists
- graphs
- profiles
- exhibits
- logs
- questionnaires
- charts
- informal tests
- case studies
- games
- interviews
- rating scales
- discussions
 - score cards
 - self-rating devices
 - tape recordings
 - sociometric procedures
 - evaluation of reactions
 - problem-situation tests
 - time studies
 - log, diaries
 - personal records
 - picture interpretation
 - other projective techniques

OBSERVATION AS AN ASSESSMENT TOOL

Assessment may be viewed as a process for testing hypotheses. Hypotheses are first generated from observation. It is the initial clues picked up during observation(s) of student behavior that give rise to more structured follow-

up in the form of assessment in specific areas. Hence it becomes clear why observation is necessary, how data derived is used, and that it requires certain skills.

Certain factors need to be considered in using observation techniques. First the setting and its structure needs to be taken into account in observing student behavior. By using the natural environment you tend to get a relevant picture of the child. A question that needs to be raised is to what extent is the situation (limiting the child's behavior? What environmental factors influence behavior?

Another issue that influences observation is the degree of interaction between the child and the observer. What does your presence do to limit/inhibit, or otherwise affect the child? Can he perform with the observer present? Does he perform, or not do things with the observer present that might otherwise happen?

The internal processes within the child also need to be addressed. Are there factors, emotional or physical, that are impacting on the child's behavior? As both an observer and a participant, trust should be established with the child so that a true picture can be obtained. Physically, any anomalies need to be noted.

In considering behavior, academic or social/emotional, there are quantifiable and qualifiable aspects. Quantifiable behaviors may include IQ scores, Frostig scores, math scores, and the number of times a child calls out in class. Affect, general cognitive style, and psychological learning style are qualifiable behaviors. Assessment will need to reflect a balance between quantifiable and qualifiable issues of behavior.

In using observation, the degree (issue of quality) and frequency (how often) of behavior needs to be obtained. Behavior may also be observed for its dynamic nature (change qualities) versus static (standard, unchanging) qualities.

Observation will fall into two categories: systematic and nonsystematic. In nonsystematic observation the observer will record general behaviors (academic, environment/child, teacher/child, child/child) in an anecdotal format. One needs to be careful that the records aren't subjectively written. For example — "Johnny's paper is messy" might better be stated as "Johnny erased his paper so that it had 3 tears in it".

In terms of systematic observation, specific behaviors are observed that have been defined so that others are clear as to what is being viewed. Stating that a child is silly might better be defined as the child is giggly, making faces, making noises. Here specific behaviors are clearly delineated. Associated with systematic observation are specific techniques. Time samples are used in which specific behavior(s) are observed over days, in an attempt to delineate patterns. One can also observe at other times in an attempt to verify patterns or their inconsistencies. Rating scales and checklists may also be used for observation of behavior. Rating scales will indicate absence or presence of specific behaviors. Either commercial or teacher made checklists or rating scales can be employed.

The advantages to using teacher made tools include their low cost and applicability to the current classroom setting.

It should be remembered that biases will influence observations. We see what we want to see. One needs to be aware of self-fulfilling prophesies that might impact on observations. It's incumbent on the observer to be aware of personal and professional biases so that objective observations may result.

Some useful references are:

Observation

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Stubbs, M. and Delamont, S. (Eds.) *Explorations in Classroom Observation*. London: Wiley, 1973.

Wallace, G. and Larsen, S.C. *Educational Assessment of Learning Problems: Testing for Teaching*. Boston: Allyn Bacon, 1978.

Weinberg, R.A. and Wood, F.H. (Eds.) *Observation of Pupil and Teachers in Mainstream and Special Education Settings: Alternative Strategies*. Minneapolis: CEC, 1975.

Standardized Tests

Teachers are cautioned against using any single test as a sole determinant of assessment data. Many tests can be used to assess the same area of focus. Refer to BUROS MENTAL MEASUREMENT YEAR BOOK, TESTS IN PRINT in order to get an in depth description of a particular test or for updated information. An annotated listing of tests commonly used by teachers is also included in the appendix. In the event contacting the publisher is necessary, a listing of their addresses is in the appendix of this handbook.

Summary

Once information has been gathered and valid data analyzed, appropriate goals can be written which reflect:

- careful evaluation of all student data to verify validity;
- assurance of formal and informal information and multifaceted information from a variety of test instruments;
- consideration of parental concerns and concerns of prioritizing for placement;
- consideration of model, to be used for teaching identified skill deficits (i.e., developmental sequences, ability deficits, etc.);
- prioritization of the referral data and assessment of needs;
- consideration of the learning channel, style, available resources;

A chart can then be made of the needs as summarized from the assessment data:

1. Needs (randomly listed)

- | | |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

2. Most Important Need (priority)

Some additional, selected references for this chapter are:

Bateman, B. "Three Approaches to Diagnosis and Educational Planning for Children with Learning Disabilities".

Bateman, B. *The Essentials of Teaching*. Dimensions Publishing Co., San Rafael, CA 94903

Bateman, B. and Haring, Norris *Teaching the Learning Disabled Child*; Prentice-Hall, Englewood Cliffs, N.J., 1977.

Bateman, B. *Reading Performance and How to Achieve It*. Special Education Publications. Seattle, Wash. 1976.

Cross, Donald P. *Educational Assessment: An Introduction*. University of Kentucky.

Salvia, John and Ysseldyke, James E. *Assessment in Special and Remedial Education*. Houghton Mifflin Company. Boston. 1978.

GOALS AND OBJECTIVES

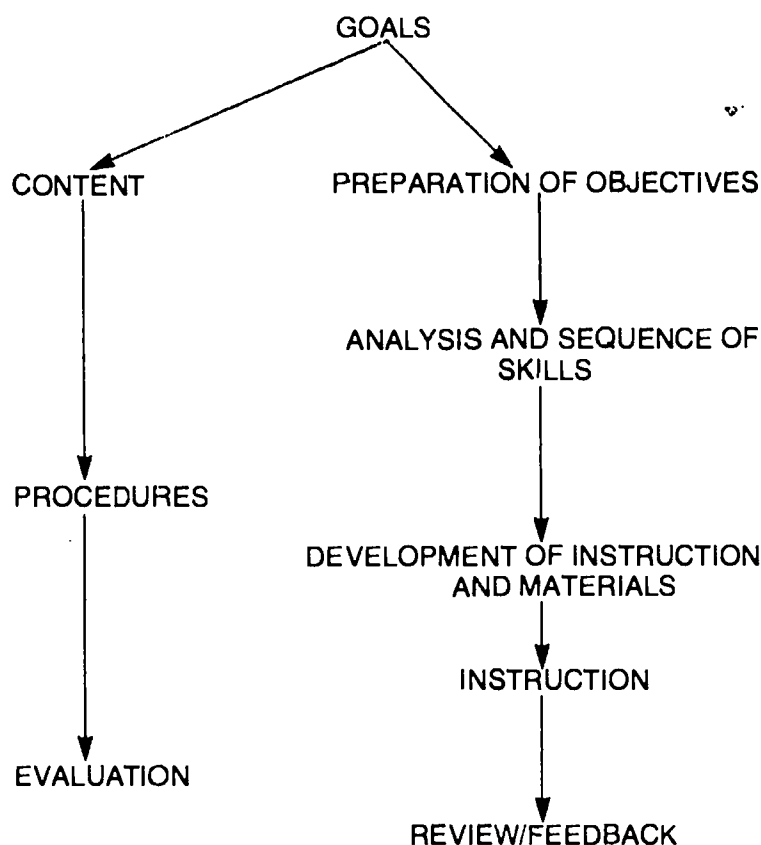


Figure 1

There are various modes and procedures used to instruct generally, and techniques have been developed and refined to aid specifically, in the achievement of objectives. Appropriate objectives and teaching strategies may be applied to facilitate learning when an attempt to understand the process of learning is pursued.

Before attempting to list requisites for writing goals and objectives, it might be important to look at learning in general. To understand *why* a specific objective should be written must be attended to *before* an attempt is made to write goals and objectives. For this reason the reader is urged to consider the material in Appendix B for background on learning theories and styles.

The achievement of annual goals is dependent upon the quality of the goal content, procedures used in the acquisition process and the evaluation of schema prepared to ascertain attainment.

The process through which activities flow in the attainment of goals include:

Preparation of Objectives — elements included from the assessment data and translated from other pertinent information.

Analysis and Sequence of Skills — Use of task analysis and sequential planning for skill acquisition.

Development of Instruction and Materials — Strategies for program development; materials needed based on learning style, need, strengths, weaknesses, etc.

Instruction — Strategies used to aid students' acquisition of skills.

Review/Feedback — Information used to provide information in cyclical fashion in order to reprogram for goal achievement.

WRITING ANNUAL GOALS

Annual goals are general descriptions of educational performances in specific skill areas to be achieved within a one year period. These general statements describe 1) the area of attention; 2) guidelines for expected attainment; and, 3) a measurable *framework* for the writing of specific or short-term objectives.

Annual goals should be written in a way that the criteria for defining the performance will address and lend credence to the following:

- actions of students which indicate achievement of the goal;
- a basis for separating achievement of goal and non-achievement;
- basis for recognition of goal achievement;
- an ideal representation of the achieved goal through terminal behavior (exhibition of competence).

The assignment of goals is derived from the assessment of the present level of performance. Goals, alone, are not measurable because they describe the intent of performance. Objectives (derived from goals) describe the intent in measurable terms. The goal, however, must be written in a way that allows for measurable objectives to be written.

Goals should be appropriate for the learner; they should require a change in behavior; needs should be correlated to the number of goals used; and they should be realistically achievable by the end of the school year. Realistic goals for a severely exceptional child will not approximate goals for a mildly impaired child. Limited improvement in overall functioning, however, may be achievable. The position on the developmental scale, then, will aid in the determination of goals.

1. Review the present level of educational performance. Include all measurement and evaluation data.
2. Review the assessment data including test results, observation input, records, scales, interviews, questionnaires, etc.
3. Compare the information obtained with the developmental level of the child.
4. Review the data and proceed to determine what the child can do and what the intention or expectations are.
5. Write the goal based on the collected data. Ask if there are indicators to show what is to be accomplished, how and when it will be achieved.
6. Determine how narrow or how global the goal should be by identifying clusters of behaviors that are related.
7. Check to assure that the goals are not so vague that problems will occur in the translation to short-term objectives.
8. Check to see if change in the child's behavior can be detected from the goal statements.
9. Prioritize the goal (from the most important to the least important).
10. Make a list of observable performances that would form an operational definition of the goal (an aid in evaluation/measurement).
11. Review the steps.

Some examples of goals written in this manner might include:

- John will dress himself properly by putting on inner and outer clothing.
- Mary will improve her in-seat behavior when given assignments by the teacher by staying in her seat, raising her hand before speaking and attending to the assignment.
- Bob will assemble parts of a carburetor and name the parts and functions.
- John will learn to lay a brick wall and verbalize the steps.
- Sally will be able to compute four different types of story problems in arithmetic.

Goals, then, provide the direction in which we wish performance to occur and should be written in order to satisfy questions of achievement. Goals reflect expectations for the child's growth.

To begin individualizing a program, implementing an IEP or engaging in daily instruction one should be cognizant of what is to be achieved, how it should be achieved

and an evaluative measure of achievement. Translated for IEP development one would:

1. Prepare meaningful goals and objectives.
2. Develop lessons and materials to implement the objectives.
3. Determine the extent to which the objectives were met and use the feedback to improve the program.

Goals are only a part of the IEP process — a very important part. There is no magical number to include; however, there should be a match between needs and abilities with the goals developed.

To reiterate the methodology of writing goals would serve no useful purpose since much has been written; rather, some additional, selected references are:

Goals

- Blomberg, Isabel E. *Goal Setting*. Waterford, Conn.: Croft Publications, 1976.
- Kemp, Jerrold E. *Instructional Design: A Plan for Unit and Course Development*. Belmont, Ca.: Fearon Publishers, Inc., 1977.
- Mager, Robert F. and Pipe, Peter. *Analyzing Performance Problems or 'You Really Oughta Wanna'*. Belmont, Ca.: Fearon Publishers, Inc.
- Mager, Robert F. *Goal Analysis*. Belmont, Ca.: Fearon Publishers, Inc., 1972.
- Mager, Robert F. *Measuring Instructional Intent or Got a Match*. Belmont, Ca.: Fearon Publishers, 1973.
- Padensky, H.R. and Gibson, J. *Goalguide: A Minicourse in Writing Goals and Behavioral Objectives for Special Education*. San Francisco: Fearon Publishers, Inc., 1975.
- Pipe, Peter. *Objectives — Tool for Change*. Belmont, California: Fearon Publishers, 1975.
- Popham, W. James and Baker, Eva L. *Establishing Instructional Goals*. Englewood Cliffs, N.J.: Prentice-Hall, 1970.

WRITING BEHAVIORAL OBJECTIVES

Behavioral objectives are specific explanations of a goal statement. Mager has defined an objective as a statement that is descriptive of an intended outcome of instruction. It defines the terminal behavior expected of a learner by stating what the learner will be doing while demonstrating achievement; the conditions under which the behavior will occur; and the criteria of acceptable performance.

Behavioral/performance objectives aid the teacher in planning instruction, guiding performance and providing acceptable measure for evaluating the cognitive (knowledge and intellectual skills), affective (attitudes and values), and psychomotor (movement related to mental activities) domains.

A teacher exerts untold physical, mental and emotional energy during the process of teaching; reasonably, a conduit to express the results of expended energies is needed. The manifestations of these efforts can be expressed and measured in student behavior; hence, behavioral/ performance objectives. Many writers of books on behavioral objectives have said "there is no basis for teaching if you don't know what to teach. Or, if you don't know where you're going, you don't know the best way to get there."

Goal statements specify intents—behavioral objectives interpret these goals in precise terms. Several components are included in the translation of goals into short-term statements.

Objectives include:

- the person doing the action;
- the behavioral task (stated in action terms);
- the object of the action (product of the behavior);
- conditions under which the task will be accomplished;
- criteria of acceptable evidence of task achievement.

BEHAVIORAL OBJECTIVES

THE STUDENT	WILL LABEL	"PARTS OF A MALE" DIAGRAM
(Doer of Action)	(Behavioral) Task	(Product or Object) of Action
BY WRITING (FROM MEMORY)		AT LEAST TEN PARTS
(Conditions)		(Standard of Achievement)

The above list can be shortened to include three components: a behavior or performance, the conditions, the criteria for evaluation.

Behavior/Performance

The short-term objective must include a description of the expected performance that determines whether an objective has been achieved. This achievement should be observable, so it can be measured objectively. Precise terms are used to specify the observable behavior (no "dead man" criteria):

TRACE	READ	CIRCLE
POINT	DRAW	SAY
WRITE	SMILE	HOP

The behavior or performance task specifies *what* the student *will do* as a result of instruction. These behaviors/ performances should *always* be expressed by the use of verbs which show *action* (see *Behavioral Terms*).

Conditions

Conditions specify what will be imposed or what the student will or will not be given while demonstrating the desired behavior to show mastery. Conditions may indicate:

- what can be used or provided;
- conditions under which behavior will occur;
- what will be denied;
- *how* the behavior will be achieved;
- instructional variables which can be manipulated by the teacher.

Conditions can be stated in a variety of ways:

- given a list of cities. . .
- from memory. . .
- without the aid or use of. . .
- using the number line. . .
- given the following problems. . .
- after reading the following and given four written questions. . .

Educational media and materials or methodology can be provided for the student as a condition of expressing mastery:

equipment	charts
places	references
instructions	books
objects	examples
people	positions
information	environment

Conditions can be imposed that specify the circumstances under which the student will be observed while performing the tasks:

working alone	jumping
writing	speaking
listening	viewing

Enough description should be included in the objective in order that everyone will know what is expected of the student. The intent is then communicated to others reading the objective.

Criteria

This component indicates the level of acceptable performance or how well the teacher wishes the student to perform. The criteria is the standard by which performance is evaluated, the yardstick by which achievement of the objective is assessed (Mager, 1975). This standard indicates *when* the student has achieved the task at a satisfactory level. It indicates a minimum of acceptable performance. Instruction can then be tested against this level to determine if the intent of the goal has been achieved.

Criteria can be described in terms of time, accuracy and duration. A criterion should be chosen that matches the behavior to be demonstrated. For example if the desire is to improve the speed of reading, the *time* can be measured in *words per minute* with *less than* — *errors per minute*. If *accuracy* is the measure the criterion can be expressed using *percentages*. If *duration* is the measure, the *length of time* for the performance can be considered e.g. *for three minutes*. If a chain of behaviors is to be performed, a

minimum number of trials from a maximum number might be considered as the criterion.

Standards can be expressed in many ways. Some examples might include:

- within ten minutes
- all must be accurate within one minute
- without any errors
- with no more than two incorrect
- without a need for repetition
- as well as described in the checklist
- three out of four correct
- 90% accuracy

Objectives should be measured frequently to ascertain mastery or the need for more effective teaching techniques.

Most teachers are familiar with the components needed in writing good objectives. A bibliography is provided for additional study.

One quick way of writing objectives would be to list the annual goal and write the applicable phrases under the correct heading. Example:

ANNUAL GOAL

BEHAVIORAL OBJECTIVE

BEHAVIORS	CONDITIONS	CRITERIA
-----------	------------	----------

Examples of some short term objectives might be:

- Without the aid of manipulatives, the student will write the sums of the following with ten out of twelve correct.
- On a number line, the child will write numbers from one to ten.
- Given an oral description, the child will draw a figure with at least six parts.

The instructional/behavioral objective will be the mechanism by which annual goals are achieved. They will be listed in sequence (prioritized) and contain behaviors, conditions and criteria for evaluation. Dillman and Rahmlow (1972) have listed other points for specifying and clarifying objectives from the idea stage of each objective to the final editing:

- levels of specificity
- principal performance
- overt behavior
- method and process
- evaluation or performance criteria
- relevant conditions
- appropriate reading level and vocabulary

Behavioral objectives are classed in the psychomotor, cognitive or affective domains and can be categorized according to levels of learning; therefore, a knowledge of what the learner is to do will benefit both the child and the teacher and provide a basis for evaluating an individualized educational program.

OBJECTIVES ARE REPRESENTATIVE OF THE CLARITY BETWEEN INSTRUCTIONAL INTENT AND PRACTICE

Objectives Do

- Represent an end not a means
- Describe the performance or behavior of student (or change in behavior)
- Describe conditions under which terminal behavior is performed
- Include the level of performance
- Clarify instructional intent
- Involve teachers in the methods as well as the evaluation process
- Restrict ambiguity and are student-directed
- Produce measureable results
- Provide for participation and feedback
- Provide a plan of action
- Provide standards of acceptable performance
- Provide appropriate vocabulary and/or reading level.

Objectives Don't

- Present general instructional criteria (should assist instruction)
- Specify teaching points (learning activities for achieving objective)
- Specify teacher behavior or performance
- End with indicator behavior (not principal performance skill)
- Present a number of possible alternatives to the goal
- Preclude the use of nebulous terms if followed by a description of the desired performance (i.e., understanding, comprehension).

Clue Words in Objectives

1. *Analyze* — to find the main ideas and show importance and relationships
2. *Compare* — to show both the similarities and differences
3. *Construct* — to make or form by combining parts by drawing, writing, etc.
4. *Contrast* — to compare by showing the differences
5. *Criticize* — to make a judgement or give a reasoned opinion of something including both good and bad points
6. *Define* — to give a formal or precise meaning by distinguishing a word from related terms
7. *Describe* — to write a detailed account, give a verbal picture or represent by a figure or model of something
8. *Diagram* — to make a graph, chart or drawing that can explain through the use of labels and/or explanations
9. *Differentiate* — to show unlikeness, differences
10. *Discuss* — to describe by giving details, pros and cons of a given concept
11. *Enumerate* — to name and/or list

12. **Evaluate** — to give an opinion, judgement, or an expert's opinion of the truth or importance of a concept. It may include advantages and disadvantages.
13. **Group** — to assemble objects, ideas, concepts, etc., as a unit with common qualities
14. **Identify** — to determine the sameness of quality and distinguishing features of something
15. **Illustrate** — to explain or clarify by concrete examples, comparisons or analogies
16. **Interpret** — to give the meaning of something by using examples and personal comments to clarify
17. **Justify** — to give a statement of personal reasons for a statement or conclusion
18. **List** — to produce a numbered list of words, sentences or comments
19. **Locate** — to determine or indicate the place, site, limits of something
20. **Match** — to place in a set items possessing equal or harmonizing attributes
21. **Outline** — to give a general summary with a series of main ideas supported by secondary ideas to show the organization of ideas
22. **Predict** — to foretell, or declare in advance on the basis of observation, reason or experiment
23. **Prove** — to show by argument or logic that a concept is true; to ascertain the validity of by evidence or demonstration
24. **Relate** — to show the connections between things by establishing a logical or casual reference
25. **Review** — to give a survey or summary in which important parts are criticized
26. **Select** — to choose from a number or group by preference with regard to specific characteristics
27. **State** — to describe the main points in precise terms, usually in formal, brief, clear sentences without details
28. **Summarize** — to give a brief, condensed account of the main idea without details
29. **Translate** — to change from one state, form or appearance to another; transcribe into one's own or another's language

Writing Behavioral Objectives

Terms to Include

To analyze
To choose
To compare
To construct
To contrast
To criticize
To define
To describe
To diagram
To differentiate
To discuss
To draw

Terms to Avoid

To accomplish
To acquaint
To acquire
To apply
To appreciate
To ascertain
To assert
To attempt
To be aware
To believe
To combine
To communicate

Terms to Include

To enumerate
To evaluate
To formulate
To group
To identify
To illustrate
To integrate
To itemize
To interpret
To justify
To list
To locate
To match
To name
To organize
To outline
To point
To predict
To prove
To relate
To review
To select
To solve
To state
To summarize
To trace
To translate
To write

Terms to Avoid

To comprehend
To conceive
To consider
To cultivate
To develop
To discover
To educate
To enlighten
To experience
To familiarize
To feel
To gain insight
To guide
To have insight
To impart
To inform
To improve
To keep abreast
To know
To learn
To master
To note
To observe
To perceive
To plan
To realize
To recall
To recognize
To represent
To reveal
To think
To try
To understand

Developing and Writing the Objective

These steps may aid in preparing objectives that are useful and evaluative:

1. Decide (from assessment data) the *traits, content and competencies* you wish the student to possess as a result of instruction.
2. Compare the data with the goals you have written.
3. With a clear view of the child's learning style and needs in the cognitive, psychomotor and/or affective domain, select the *area of priority* (from goals) and *content area*.
4. Select an appropriate *behavioral term* from the cognitive, psychomotor or affective checklist. Be certain the verb is compatible with the child's ability to perform and is measurable.
5. Include the *learning conditions* or circumstances under which the task or behavior is to be performed or accomplished. Include the conditions under which the child will be observed while performing the task.
6. Write the acceptable *level of performance* which indicates when the task has been satisfactorily achieved. This is a minimum level of evaluation. This standard

can be expressed in time, accuracy, percentages, duration, etc.

7. Check your objective to test the *compatibility* of the objective with student need, ability, learning style, learning rate, amount of pressure, motivation, physical environment required and time required.
8. Note if your objective can be read by another person and interpreted correctly:
 - conditions for testing
 - measureable behavior
 - totally clear evaluation criteria

Recording the Objective

The individualized educational program has added to the "paper tasks" in which teachers must engage (admitted). One writer said, "It's hard to smile through tears," but, there are *advantages* of keeping a record of changes in behavior (or lack of change in behavior). The Portage Project Parent Guide gives an excellent example of the need for recording results of *dieting*. The goal, of course, is to lose weight. Measurement is done in order to know if the desired change is taking place. This measurement may be in the following forms:

1. estimation of the amount of "extra" fabric in a specific article of clothing
2. scales for detecting weight loss
3. recording of baseline data to assure the weight loss with comparison over a time period.

An analogous relationship exists between the Portage Project's diet story and measuring the effectiveness of the prescribed goals and objectives of the IEP. The testing of

children can be a relatively easy task, the follow-up, *assessment*, which involves the sorting of test results, interview statements, developmental diagnoses, ratings from scales, etc. is perhaps the most important part of extracting meaning and planning an intervention program.

Once the program is operative a teacher would wish to see the "fruits of his/her labor". Documentation of progress (or lack of progress) will subsequently aid the teacher, student and parents to assist in revising the IEP.

Some additional, selected references are:

Objectives

Dillman, Caroline, M. and Rahmlow, Harold F. *Writing Instructional Objectives*. Belmont, Ca.: Fearon Publishers, Inc., 1972.

Mager, Robert F. *Developing Attitudes Toward Learning*. Belmont, Ca.: Fearon Publishers, Inc., 1968.

Mager, Robert F. and Pipe, Peter. *Analyzing Performance Problems or 'You Really Oughta Wanna'*. Belmont, Ca.: Fearon Publishers, Inc., 1970.

Mager, Robert F. *Preparing Instructional Objectives*. Belmont, Ca.: Fearon Publishers, Inc., 1975.

Pipe, Peter. *Objectives—Tool for Change*. Belmont, Ca.: Fearon Publishers, Inc., 1975.

Kibler, Robert. *Behavioral Objectives and Instruction*.

Sanders, Morris. *Classroom Questions: What kinds?*

Popham, James W. *The Uses of Instructional Objectives: A Personal Perspective*. Belmont, Ca.: Fearon Publishers, 1973.

Weigand, James, E., Ed. *Developing Teacher Competencies*. Englewood Cliffs: Prentice Hall, Inc., 1971.

RECORDING GOALS AND OBJECTIVES

Several plans for recording objectives have been devised. The IEP forms have spaces provided for writing goals and objectives; however, the day to day planning would require "reams of paper" and attachments if all of the teachers efforts were recorded.

The following chart is a way of handling the recording that is needed to supply required information. The sheets can be xeroxed and used as daily plans; later, the information can be transferred using more generalized statements:

STUDENT:		WEEK OF:	
GOALS #			
OBJECTIVE(S) NUMBER(S) OR GENERAL TITLE(S)			
		ACHIEVED	
THE STUDENT WILL:	TEST OF SKILL	YES	NO
1.			
2.			
3.			

RECORDING FOR GROUP TEACHING

Use this sheet when teaching the same skill to more than one child.

OBJECTIVE: (Number or Written)	NAMES OF GROUP:
STRATEGIES:	SPECIAL NOTATIONS:
1.	
2.	
3.	

FOLLOW-UP STRATEGIES OR MATERIALS NEEDED:

TASK ANALYSIS

Task analysis, when applied to educational assessment and programming, is one of those often neglected tools that enables a good teacher to teach better, permits an artistic teacher to inject some "science" into the teaching process, and helps the flying-by-the-seat-of-the-pants teacher avoid so many crash landings. We presume that pre-service teacher education programs and at least one system-wide in-service program a year explain, exhort the use of, and drill practice-teachers and teachers in the use and mastery of task analysis. If that is the case, reading the next couple of pages can be a turnoff, but . . . maybe it wouldn't hurt to do a little check. If you are willing, answer the following ten questions. If the answers are obvious to you and you feel no need to turn to the key at the end of the explanation to check yourself, c'est la vie. BUT. . . if you have some curiosity about whether you are correct in your choice of answers, or don't know from Adam if you are even close — read it. Do the samples and then try the test again.

Task Analysis: Pre and Post Test

- When performing a task analysis, what three basic actions must one consider with all necessary sub-tasks?
 -
 -
 -
 - Task analysis directs one's attention primarily to:
 - the child;
 - the teacher;
 - the objective;
 - the environment.
 - Circle the true statement:
 - Task analysis is a standardized diagnostic procedure that yields valid diagnostic information.
 - Task analysis is an informal diagnostic procedure which does not guarantee validity.
 - All steps in a task analysis should be stated in words that represent:
 - observable behaviors;
 - processes;
 - relationships.
 - What is the formula for describing the necessary subtasks? _____ plus _____
 - Task analysis is used in determining which mental processes are involved in an objective.
True or False
- A child was given the following command: "Ryan, put on your pants."
- Which of the following would *not* appear in a task analysis of this objective:
 - can attend to the task;
 - can put one foot into the leg-hole of his pants;
 - can discriminate between his right and left leg;
 - can pull his pants from ankle to calf of his leg.
 - Which of the following would *not* appear in a task analysis of this objective:
 - can pull pants from calves to knees;
 - can pull pants from knees to mid-thighs;
 - can pull pants from groin to waist;
 - can repeat the directions: "Ryan, put on your pants."
 - Which of the following would *not* appear in a task analysis of this objective:
 - can identify waist, knees and legs;
 - can attend to the task;
 - can grasp his pants;
 - can pull his pants from mid-thigh to groin.
 - To use task analysis diagnostically, you:
 - analyze the child's intellectual ability;
 - construct a checklist with a test item for each sub-test;
 - determine the child's best input or output mode;
 - gather information regarding other diagnostic workups completed by physicians, social workers, physical therapists, etc.

Task analysis is an informal diagnostic technique that helps us gather the information that assists our decisions about what specific tasks to teach the learner.

One of the basic principles of teaching any child with mild to severe learning problems, is that the learning tasks we present to him should be broken down into small, sequential steps. Breaking tasks or objectives into small, sequential steps is task analysis. Barbara Bateman, in "The Essentials of Teaching," describes task analysis "as the process of a) *isolating*, b) *describing* and c) *sequencing* all necessary subtasks which, when the child has mastered them, will enable him to perform the objective" (Bateman, 1971, p. 33). Teachers, consultants and so forth use task analysis as both a diagnostic and remedial tool. In this explanation, we will explore the use of task analysis as a diagnostic technique.

To use task analysis diagnostically, you a) specify an instructional objective the child is having difficulty meeting; b) break it into subtasks; c) construct a checklist with a test item for each subtask; d) administer the checklist; and e) teach the child the subtasks he doesn't know. When the child is able to do all the subtasks that are part of the objective, he should be able to complete the objective.

There are two things to remember when you're doing task analysis. First, pretend you are a strict behaviorist. You are interested only in behaviors you can observe — those that can be seen, heard, measured, or counted. You should not attempt to make inferences about what goes on "inside" the child. For example, let's not use a term like "visual discrimination." A term like that doesn't tell us much. There are many definitions of "visual discrimination." It is hard to measure or calculate the extent of the problem in the area when it is stated as "visual discrimination." However, if we state the term in more observable language such as "can match a teaspoon with another teaspoon when a tablespoon is present." then we can see the child perform that task. We've changed a statement of a task from something we were guessing went on "inside"

the child's brain to a task that is observable. So, concentrate *only* on the observable subtasks the child needs to do in order to complete the objective. Ask yourself questions like: "Does the child need to do this subtask to meet the objective?" or "Is it something I can see, hear, count, or measure?" It will also be helpful to remember that when we're trying to do a task analysis using observable behaviors we can use this formula:

Action verb plus object.

For example, an action verb is "pick up" and an object is "Kleenex." "Matches" "pictures" is another example. The second point to remember when using task analysis is to concentrate on the objective you're trying to teach the child. At this time, we don't need to concentrate on the child himself. If you did consider a specific child each time you task analyzed an objective, it would greatly increase the amount of time needed to do task analysis. It would mean that each time you taught the objective to a child with a different handicapping condition, you would have to reanalyze the objective. It makes more sense to decide what tasks are involved in the objective that the child must complete in order to finish the objective. Then, when it is time to teach the child the objective, modify only the subtasks that are necessary to change in order to individualize for the child's handicapping condition.

In the following pages, we are going to apply task analysis to a specific non-academic task as an example, discuss it, and then give you an opportunity to analyze and compare your analysis to what someone else has done. We will use as the example a pre-academic task of the sort a person would be teaching to a severely, multiple handicapped child. While task analysis is an effective informal diagnostic and prescriptive programming technique to use with any child, there is an enormous lack of appropriate and readily available diagnostics for that particular group of children. Remember though, the process is the same when you analyze any task — only the objective or task being analyzed varies. It will be helpful to keep in mind that: a) task analysis involves isolating, describing and sequencing subtasks; b) task analysis is action verb plus object; and c) task analysis involves *only* observable behavior.

Let's say we wanted a child to remove his long pants completely without assistance. He couldn't do it so we decided to gather some informal diagnostic information about why he couldn't by using task analysis. Our objective is that Peter will completely remove long pants with an elastic waist, without assistance, when given the command: "Peter, take off your pants." The task analysis of removing long pants is:

- a. Attends to the teacher and task.
- b. Grasps waist band of pants with hands.
- c. Pulls pants from waist to groin.
- d. Pulls pants from groin to mid-thighs.
- e. Pulls pants from mid-thighs to knees.
- f. Pulls pants from knees to calves.

- g. Pulls pants from calves to ankles.
- h. Sits down.
- i. Grasps one pant leg.
- j. Pulls the pants from one ankle and foot.
- k. Pulls the pants from the other ankle and foot.

This completes the first and second steps of task analysis. We have listed a specific objective we want the child to achieve and broken it into small subtasks. The third step is to construct a checklist with a test item for each subtask.

Task Analysis	Check
a. attends to teacher and task	looks at teacher for 30 seconds while teacher demonstrates task
b. grasps waist band of pants with hands	knows where waist band is; grasps waist band

If we wanted to check to see if the child was attending to the teacher and task, we would first define what attending was in observable terms. Let's say it meant looking at the teacher for 30 seconds without looking away while the teacher says: "Peter, take off your pants" and demonstrates the task for him. By defining it in this way, we would teach him to attend because he would need to do this subtask in order to complete the objective. A way to check to see if he could grasp the waist band of his pants would be to see if he could grasp and if he knew where the waist band of his pants was.

To check out the remaining subtasks, you could remove the child's pants completely except for the subtask you are checking. For example, you would start with his pants at his waist then say: "Peter, take off your pants." You would pull them down to his knees allowing the child to finish. If he can complete that subtask, you would check to see if he could remove the pants from his mid-thighs. If he *could not*, you would know that you might have to teach him how. However, don't stop checking the subtasks just because you find one he can't do. Check to see if he could remove his pants if they were at his groin. For some reason, he may be able to do this yet not be able to remove them from his mid-thighs. If you found this to be true, you wouldn't need to teach him how to remove them from his mid-thighs. By checking the subtasks in this manner, you would determine which subtasks must be taught in order for the child to achieve this self-help skill. The entry behavior of "attending" is almost always included. It is a good idea to always list this, where appropriate, because it is so important for the completion of every objective and unless we list it we often forget to check to see if the child does attend.

When you're teaching the subtasks to the child that he didn't know, remember to check for generalization. Sometimes, when you're teaching a child one subtask, he may learn another one automatically. So, after teaching the first subtask, administer the test item from the checklist for the next subtask you're going to teach him before starting to

teach it to him. It won't take long and it may prevent you from teaching the child something he already knows.

Chapter 3 of "The Essentials of Teaching" provides excellent background and depth to an understanding of task analysis. Some points the chapter makes are:

1. In all teaching, it is important to begin instruction on the appropriate level of task difficulty. A thorough task analysis enables the teacher to determine quite precisely where to begin instruction.
2. Task analysis provides an efficient means for assessing what skills the child needs to learn to complete the objective.
3. The uses of task analysis include:
 - a. Assessing Entering Behavior
A meaningful assessment of entering behavior requires that the teacher:
 - i. specify instructional objectives for the tasks to be taught;
 - ii. list the essential subskills and/or prerequisites to each task;
 - iii. construct a brief checklist of test items representing the subskills;
 - iv. administer this checklist to the students.

This procedure rather than relying on normative tests, interviews, or other so-called diagnostic data will provide the teacher with a meaningful assessment of content-related entering behaviors (Bateman, 1971, pp. 42-43).

- b. Grouping for Instruction, and
 - i. The teacher makes a brief checklist of the 10 or 15 specific educational objectives considered most vital for the children to be working toward during the first portion of the school year. These objectives might include such specifics as reading maps, solving long division problems, or writing.
 - ii. The teacher conducts a sample lesson pertinent to each of the items on the checklist, keeping the entire group together for the sample lesson.
 - iii. On the basis of the children's responses to the lesson, the children who have the most to learn before reaching objective can be readily identified and formed into a group. The second sample lesson can assist the teacher in finding the next group. This procedure could be used to select as many groups as necessary, remembering that when it begins to be difficult to make discriminations among the remaining children they can probably be grouped together, at least temporarily.
 - iv. Often we must remind ourselves that some children will come to us with entering behaviors already higher on some task ladders than we have envisioned for most of the group after instruction. If a child can write a ninth-grade level

composition in the fifth grade, it would be inappropriate and unethical for us to require him to punctuate sentences in a fifth-grade workbook. Such sample lessons as we are processing for grouping purposes should also be used to find those children for whom no additional instruction on a task ladder is appropriate. Such children can then be shifted to more advanced work, perhaps by individualized instruction or by being moved to a higher grade (Bateman, 1971, p. 44).

c. Readiness*

In any discussion of entering behavior, the term "readiness" is bound to arise. Our contemporary society is quick to coin new terms whenever they seem helpful or otherwise catch our fancy. Thus, our dictionaries get thicker each year. We are somewhat less quick to drop terms that have lost whatever utility they may have once had. "Readiness" may be a prime candidate for the lost-utility file, should we ever construct one. Everyone is always ready to learn whatever comes on the next rung of any task ladder we might construct. If Robert is on rung 17 of the self-dressing ladder, he is ready for rung 18. If May is on rung 1, she is ready for rung 2. Since schools have traditionally begun their relationship with children at age five or six rather than at birth, we have not extended our ladders down into the skills and concepts ordinarily learned prior to school. So, in effect, our school reading ladders (and most other task ladders, too) begin at step 10 (or any other number we prefer) rather than step 1. When a child comes to us at age six and is on rung 4, instead of ten, we have tended to say he "isn't ready for reading." What we really mean is that we haven't thought about how to teach rungs 1 through 9 and so we aren't ready for him! He has further to climb than most of our six year olds to reach the instructional objective of being able "to say the appropriate spoken equivalent for visually presented groups of English letters." Therefore, he is the one who is most in need of teaching. And yet he is the one most frequently told to wait a year until he is ready! If a child is to catch up with others who are ahead of him, we must teach him more and faster (Bateman, 1971, pp. 45-46).

With this for background, it's your turn to perform some task analysis. After you are finished, you should compare your task analysis to the ones that we previously prepared. Ours are not necessarily the correct answers. We ask you to compare yours to ours in case you have left out something that we have included or vice versa. Or, if you aren't sure of the correct sequence, looking at how someone else did it may help you. Please try to use common words when you task analyze these tasks. By using common terms, we can

*Quoted material from Barbara Bateman's *Essentials of Teaching*. Dimensions Publishing Co. Permission to reprint is from Arlyce House, Adapt Press.

more easily understand what everyone means. Remember the rules of task analysis.

1. It is isolating, describing, and sequencing subtasks
2. It is action verb plus object.
3. It involves only observable behavior.

Be sure to compare your task analysis with the key after each analysis.

Task Analysis #1

Object Discrimination Using Pictures

The teacher places three different picture cards (ball, cup and orange) on the table and says, "Sally, point to the ball." After the child has pointed to the ball, the teacher asks her to point to the cup and the orange.

Task Analysis #2

Concept Development

The teacher and child are seated at a table. On the table are placed a ball, an apple and a sock. Beside the table is a box. The teacher says to the child, "Ann, put the ball in the box."

Doing these task analysis may have seemed tedious or difficult but task analysis does become easier and quicker to do the more you do it. Did you notice this as you practiced? Here are some shortcuts to note to make the use of this tool less time-consuming.

1. Although you usually task analyze most objectives you teach a child, you need to only thoroughly task analyze those objectives he is having problems achieving.
2. Save every task analysis you do. Another child may have problems with that task or one similar to it.
3. Teachers in a building could make a file of all the task analyses they have done. Then, before doing one, you could check the file to see if that task had already been analyzed. If you did put all the task analyses in a file, it would be important to agree on a common set of terms first.
4. There are some books available that contain the analyses of many tasks that other professionals have written. However, even when these are available, you have to know the process of task analysis. For example, every child will not learn the tasks in the same sequence and some of the tasks in the book may have to be broken down even further for some children. If you don't know how to do this, the book won't be of much use to you.

We hope this explanation was helpful. It is not meant to replace the opportunity to learn and practice this tool with your professional peers, but rather to be a reminder of the essential points. This explanation of task analysis has been largely derived from information presented in papers by Robbie King and Anne R. Sanford, "The Essentials of Teaching" by Barbara Bateman and especially from the

Task Analysis module of "Informal Diagnosis and Prescriptive Programming," a workshop manual distributed by the Mid-West Regional Resource Center.

KEY TO TASK ANALYSIS

Task Analysis #1

Object Discrimination

1. Attends to teacher and task.
2. Matches verbal stimulus of the word with the visual stimulus of the picture.
3. Points to picture.

Task Analysis #2

Concept Development

1. Attends to teacher and task.
2. Demonstrates understanding of key word in the directions: "in."
3. Matches stimulus of word ball with object ball.
4. Locates ball.
5. Locates box.
6. Grasps ball.
7. Finds the area of the box into which to put the ball.
8. Opens hand to release ball.

Task Analysis Pre/Post Test Answer Key

1. (a) isolate, (b) describe, (c) sequence
2. (c) the objective
3. (b) informal diagnostic procedure
4. (a) observable behavior
5. action verb plus object
6. false
7. (c) discriminates between right and left leg
8. (d) repeat directions
9. (a) can identify
10. (b) construct a checklist

Some additional, selected references are:

Task Analysis

- Bateman, B. "Three Approaches to Diagnosis and Educational Planning for Children with Learning Disabilities." *Therapy Quarterly*, 1967, 11, 215-222.
- Bateman, B. *The Essentials of Teaching*. Dimensions Publishing Co., San Rafael, California, 94903.
- Englemann, Siegfried. *Preventing Failure in the Primary Grades*. S.R.A., Chicago, Illinois, 1969.
- Espich, James E. and Williams, Bill. *Developing Programmed Instructional Materials*. Fearon Publishers, Palo Alto, California, 1967.
- Mager, Robert F. *Preparing Instructional Objectives*. Fearon Publishers, Inc., Palo Alto, California, 1968.

Popham, W. James and Baker, Eva L. *Systematic Instruction*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1970.

Valett, R. *Effective Teaching: A Guide to Diagnostic-Prescriptive Task Analysis*. Fearon Publishers, Palo Alto, California, 1970.

Wheeler, A. and Fox, W. *Behavior Modification: A Teacher's Guide to Writing Instructional Objectives*. H&H Enterprises, Kansas, 1972.

Worell, Judith and Nelson, C. Michael. *Managing Instructional Problems*. McGraw-Hill Book Company, New York, 1974.

EDUCATIONAL MEDIA AND MATERIALS

CONSIDERATIONS FOR THE USE OF ASSIGNED MATERIALS

Here is a quick reminder of things to consider when giving assignments. This inventory might assist in making assignments more individualized.

- Does the assignment exemplify the instructional objective?
- Are the skills related to the assignment those skills needed by the student(s)?
- Is there an individualized approach used in the assignment of the task?
- Is the modality and/or format of the material appropriate to the learning style of the student?
- Is the assignment appropriate to the learning style of the student?
- Is the material appropriate to the learning rate of the student?
- Are the required responses to the material compatible with the capabilities of the student?
- Is the language level of the material appropriate to the student's level of language development?
- Are the chosen/assigned materials representative of different cultures, races, religions, sexes, etc.?
- Are there stereotypical roles involved with characters?
- Are there multiple options for feedback (provisions for the student to report)?
- Does the feedback mechanism allow for self correction (if not teacher corrected)?
- Is the pacing individualized?
- Are sequential levels of difficulty addressed?
- Are alternatives presented for achieving the objective?
- Are there considerations for the type of disability? (Sensation, perception, imagery, symbolization, conceptualization)?

Planning any instructional program requires time, thought, learner interaction, assessment, reassessment and sequencing which reflects the aforementioned. Any program which proposes to "fit" the needs of all learners (exceptional or not) should be suspect in programming designs. Any ideal learning analysis, sequence, etc., should not be limited to a specific strategy. The paths through which materials and tasks are presented cannot be effective for all or the same students. Non-effectiveness can be minimized by careful study of each student's style of interaction and learning, desirable motivators and reinforcers, and a thorough investment involving planning which requires a lot of time and effort.

The ultimate end in the achievement of goals is to prepare students to become independent. The selection of specific instructional strategies should (a) promote progress toward this end; (b) allow proficiency in achieving desired tasks; (c) provide increments small enough to be achievable; (d) differentiate those optimum conditions that promote learning; and (e) provide the positive interaction needed to move from a dependent level.

COMMERCIAL PROGRAMS FOR IEP DEVELOPMENT

Several publishing companies have designed materials which have sequenced objectives, suggestions and strategies for implementing individualized educational programs. A sampling of specific programs is listed in the appendix.

If a specific program is chosen, care should be exercised in the adjustment of teacher interaction, program adaptation and modification to learner needs. The program may have the need for further development, modification or

the extension and/or revision of concepts. There may be a need for:

- environmental changes to accommodate use of a specific material;
- changes for enrichment purposes;
- format changes to accommodate presentation of specific concepts and skills;
- use of cardboard, poster board, cardboard boxes, cigar boxes, portable boards, etc., with large writing to present concepts, puzzles, other tasks;
- restructuring of vocabulary, sentence length and content to age and experience level;
- adapting materials to show concrete examples rather than abstractions;
- use of tape recorders, videotapes or filmstrips to adapt concepts;
- rewriting a printed page into manuscript.

STANDARD CRITERIA FOR THE SELECTION AND EVALUATION OF INSTRUCTIONAL MATERIALS

Adapted from the National Center on Educational Media and Materials for the Handicapped, The Ohio State University.

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I. Review of Instructional Materials

A. Analysis of Material

(This section includes recommended questions for determining the intrinsic qualities of the material(s) independent of specific learner characteristics and program requirements.)

Yes No NA

1. Are objectives in behavioral terms? (specifying what the student task is, under what conditions, and level of performance expected)
2. Are techniques of instruction for each lesson either clearly specified or self-evident?
3. Are facts, concepts, and principles ordered in a logical manner? (e.g., chronologically, easy to difficult, etc.)
4. Does the material contain appropriate supplementary or alternative activities that contribute to or extend proposed learning?

Yes No NA

5. Is repetition and review of content material systematic and appropriately spaced?
6. Does the content appear accurate?
7. Does the material avoid content which betrays prejudice, perpetuates stereotypes, or neglects the talents, contributions, or aspirations of any segment of the population?
8. Can the material be readily adapted to meet individual learner differences in abilities and interests?
9. Can pacing of the material be adapted to variations in learner rate of mastery?
10. Is provision for adapting, altering, or combining input and response modalities according to learner variations?
11. Does the material incorporate evaluation items and procedures which are compatible with program objectives?
12. Are there sufficient evaluative items to accurately assess student progress?
13. Is performance assessed frequently enough to allow accurate assessment of student progress and continuous feedback to learner?
14. Is the format uncluttered, grammatically correct, and free of typographical errors?
15. Are illustrations and photographs clear, attractive, and appropriate to content?
16. Are auditory components of adequate clarity and amplification?
17. Are all necessary components either provided with the material or readily and inexpensively available?
18. Can consumable portions of materials be easily and inexpensively replaced or legally reproduced?
19. Is cost reasonable in comparison with similar commercial materials or homemade alternatives?
20. Does the publisher clearly state the rationale for selection of program elements, content, and methodology? (e.g., choice may be based on tradition, survey of other materials, logic of subject matter, experimental evidence, unvalidated theory)
21. Are testimonials, research, and publisher claims clearly differentiated?
22. Are reinforcement procedures and schedules clearly indicated?
23. Is a variety of cueing and prompting techniques used?

B. Matching Material to Learner

(This section involves the integration of the

identified learner needs with the analyzed material characteristics to determine compatibility for instructional purposes.)

Yes No NA

- | | | | |
|--------------------------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1. Are stated objectives and scope of the material compatible with learner's needs? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Are prerequisite student skills/abilities needed to work comfortably and successfully with the material specified and compatible with the learner's characteristics? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Are the skills and abilities needed by the instructor to work effectively with the materials specified and compatible with instructor's expertise? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. Are levels of interest, abstraction, vocabulary, and sentence structure compatible with characteristics of the learner? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 5. Is the degree of required teacher involvement (constant interaction, supportive or monitoring role, largely student directed, variable) compatible with learner characteristics? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. Does the material incorporate motivational devices to sustain student interest which are appropriate to the learner's characteristics? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. Are input modalities (visual, auditory, motor, tactile) compatible with learner characteristics? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. Is the demonstration of task mastery (e.g., written test, performance test, oral test) compatible with or adaptable to intended learner's characteristics? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 9. Is the format of the material (e.g., game, book, filmstrip, etc.) compatible with the learner's mental and physical abilities? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. Is the durability and safety of the material adequate for the learner? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11. Is information provided indicating (successful) field testing of the material with students similar in learning characteristics and interests to those of the learner? |

II. Determination of Material Suitability

- A. As a result of the review process, which questions have you identified as (most) critical to you in deciding to utilize the material with the learner?
- B. On the basis of those critical priority concerns, is the material appropriate for specified learning requirements?
- ☐ Yes (implies accept)
- ☐ No (implies reject)
- ☐ Unsure (requires more analysis)

- C. If unsure of appropriateness, are there other less critical questions which could be considered in making the decision to utilize the material?
- D. On the basis of those additional considerations, is the material now deemed appropriate for specified learning requirements?
- ☐ Yes
- ☐ Unsure
- E. If still unsure of appropriateness of the material, will comparison with other previewed material(s), in relation to critical questions, help identify the material which most closely approximates the specified learning requirements?
- F. If still unsure of the appropriateness of the material, would modifications of the material render it usable?
1. Do you have access to resources for required modification?
- G. If no:
1. Return to search process. Reexamine sources of material identification and information in locating other potential materials.
2. Review learner characteristics in an effort to modify requirements for material.

III. Planning for Individualized Instruction

A. Learner Characteristics

(The following outline is intended to serve as a guideline to the selector of instructional materials in identifying the characteristics and educational requirements of the specific learner for whom material is being sought.)

1. What are the possible modes of input?
- ☐ auditory
- ☐ visual
- ☐ tactile
- ☐ kinesthetic
2. What are the preferred modes of input?
- ☐ auditory
- ☐ visual
- ☐ tactile
- ☐ kinesthetic
- ☐ multisensory
3. What are the possible modes of response?
- ☐ verbal
- ☐ written
- ☐ gesture
4. ☐ What is the learner's instructional level?
5. ☐ What is the learner's interest level?
6. ☐ What is the learner's reading level?
7. ☐ What is the learner's interest area?

8. What are the learner's interest/motivation requirements?

- a. ☐ use of a game-type format
- b. ☐ use of humor
- c. ☐ use of a variety of stimuli
- d. ☐ use of suspense
- e. ☐ use of novelty
- f. ☐ use of an interaction system of instantaneous feedback
- g. ☐ use of cartoon format
- h. ☐ use of puppets
- i. ☐ use of characters

9. ☐ What are the learner's entry level skills?

10. ☐ What are the learner's reinforcement requirements?

B. Teacher Requirements

(The following outline is intended to serve as a guideline to the selector of instructional materials in identifying the requirements to allow a teacher/instructor to effectively use the material.)

- 1. ☐ Are a teacher's manual and/or instructions provided?
- 2. If a teacher's manual and/or instructions are provided, does it include:
 - a. ☐ philosophy and rationale
 - b. ☐ statement of objectives
 - c. ☐ statement of instructional and interest levels
 - d. ☐ statement of prerequisite skills
 - e. ☐ statement of reading level
 - f. ☐ listing of material/program elements
 - g. ☐ listing of required materials and equipment
 - h. ☐ suggestions for teacher/instructor use
 - i. ☐ suggestions for student/learner use
 - j. ☐ suggestions for instructional alternatives
 - k. ☐ suggestions for evaluation
 - l. ☐ suggestions for additional resources

3. Instructor time requirements:

- a. ☐ training
- b. ☐ preparation
- c. ☐ use
- d. ☐ clean-up

4. What is the degree of instructor involvement?

- a. ☐ full-time teacher involvement is required during instructional period
- b. ☐ part-time teacher involvement required

- c. ☐ no teacher involvement required
- d. ☐ full-time aide involvement required
- e. ☐ part-time aide involvement required
- f. ☐ no aide involvement required
- g. ☐ full-time parent involvement required
- h. ☐ part-time parent involvement required
- i. ☐ no parent involvement required
- j. ☐ full-time peer involvement required
- k. ☐ part-time peer involvement required
- l. ☐ no peer involvement required
- m. ☐ materials can be used independently by learners

Yes No NA 5. Is the material practical?

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | a. maneuverability |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | b. ease of storage |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | c. number of parts |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | d. identification of parts |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | e. size of parts |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | f. storage/organization of parts |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | g. durability of product and packaging |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | h. replaceability of consumable and non-consumable parts |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | i. requires use of specialized equipment |
6. Is the total cost reasonable?
- a. ☐ inservice training
 - b. ☐ initial cost
 - c. ☐ per use cost (replacement of consumables)
 - d. ☐ require supplementary materials costs
 - e. ☐ replacement costs (replacement of non-consumables)
7. Is the material appropriate for the curriculum?
8. Has this material been field tested?
9. If so, has it been found to be effective?

C. Material Characteristics

(The following outline is intended to serve as a guideline to the selector of instructional materials in identifying specific characteristics a material requires to allow for communication with a learner.)

A = Acceptable UA = Unacceptable

1. Technical quality

- a. Quality of auditory presentation:
 - (1) clarity (easily understood, A UA recording quality good) ☐
 - (2) amplification ☐
 - (3) voice level ☐

- | | A | UA | Yes | No | NA |
|---|-----|-----|-----|-----|-----|
| (4) dialect/accent | ___ | ___ | ___ | ___ | ___ |
| (5) voice speed | ___ | ___ | ___ | ___ | ___ |
| (6) voice quality | ___ | ___ | ___ | ___ | ___ |
| (7) sequence | ___ | ___ | ___ | ___ | ___ |
| (8) quality of narration
(reader style) | ___ | ___ | ___ | ___ | ___ |
| (9) music/sound/voice
mixing | ___ | ___ | ___ | ___ | ___ |
| b. Quality of visual presentation: | | | | | |
| (1) sharpness | ___ | ___ | ___ | ___ | ___ |
| (2) color | ___ | ___ | ___ | ___ | ___ |
| (3) distracting elements | ___ | ___ | ___ | ___ | ___ |
| (4) complexity | ___ | ___ | ___ | ___ | ___ |
| (5) size relationships | ___ | ___ | ___ | ___ | ___ |
| (6) sequence | ___ | ___ | ___ | ___ | ___ |
| (7) subjective angle (learner point
of view) | ___ | ___ | ___ | ___ | ___ |
| (8) objective angle (observer point
of view) | ___ | ___ | ___ | ___ | ___ |
| (9) composition (visual format,
visual arrangement) | ___ | ___ | ___ | ___ | ___ |
| (1) figure-ground definition | ___ | ___ | ___ | ___ | ___ |
| c. Quality of print and graphic
presentation: | | | | | |
| (1) legibility (style and size) | ___ | ___ | ___ | ___ | ___ |
| (2) captioning (location and
placing) | ___ | ___ | ___ | ___ | ___ |
| (3) clarity of print (contrast) | ___ | ___ | ___ | ___ | ___ |
| (4) accuracy | ___ | ___ | ___ | ___ | ___ |
| d. Quality of tactile presentation: | | | | | |
| (1) braille (clear and easily
discriminable) | ___ | ___ | ___ | ___ | ___ |
| (2) tactile drawings (clear and
easily discriminable) | ___ | ___ | ___ | ___ | ___ |
| (3) texture (clear and easily
discriminable) | ___ | ___ | ___ | ___ | ___ |
| (4) composition (physical format,
physical arrangement) | ___ | ___ | ___ | ___ | ___ |
| (5) manipulables (discriminable,
dimension, shape, mass) | ___ | ___ | ___ | ___ | ___ |

2. Instructional quality

Yes No NA

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

- Does the selection of subject matter facts adequately represent the content area?
- Is the content presented in the material accurate?
- Is the content organized for ease of study?
- Is the content logically sequenced?
- Are various points of view, including treatment of minorities, handicapped, ideologies, personal and social values, sex roles, etc., objectively represented?
- Are the objectives of the material clearly stated?

- Is the content of the material consistent with the objective?
- Are the prerequisite skills for use of the materials stated?
- Are essential sub-skills required included in the instructional sequence?
- Is the reading level of the material stated?
- Is the vocabulary systematically introduced?
- Is the vocabulary consistent with the stated reading level?
- Is the instructional level stated?
- Is the interest level stated?
- Is the material self-pacing?
- Does the material provide for frequent reinforcement of major concepts?
- Does the material summarize and review major points?
- Does the material provide frequent opportunities for active student involvement and response?
- Does the material provide for evaluation of user performance?
- Does the material provide criterion referenced assessment?
- Are all of the supplementary materials needed for instruction included in the materials package?

D. Matching Material to Learner

(The following questions require a synthesis of information gained thus far. The synthesis is essential before proceeding.)

- Are the characteristics of the material compatible with perceived learner characteristics?
- Are the characteristics of the material compatible with perceived teacher requirements?
- Have you checked the list of criteria in the Review, section B, Matching Material to Learner?

SELECTED MATERIALS

Some additional, selected references in the areas of Curriculum, Mainstreaming, and Classroom Diagnostics: (The following list of annotated references is included to further aid the classroom teacher engaged in the process of selecting appropriate methods and means of instruction.)

Curriculum, Instruction and Learning Activities
Ackerman, Jeanne *Play The Perceptual Way*, Special Education Publications, Seattle, Washington.

A book of games, perceptual motor activities to help children organize their thinking, to help the over-active child gain better control and improve a child's self-concept. The games are ability sequenced for ages 4-12 to develop body image, balance, laterality and directionality, locomotion, eye-hand coordination and rhythm.

Alpern, Gerald and Ball, Thomas J. *Education and Care of Moderately and Severely Retarded Children*, Special Education Publications, Seattle, Washington.

A one volume collection of new materials and activities to be used with children of limited abilities, concentrating on profoundly retarded children. An extensive curriculum and activities guide gives step-by-step detail.

Barch, Ray H. *Enriching Perception and Cognition Techniques for Teachers* Vol. 2, Special Education Publications, Seattle, Washington.

Presents techniques to be used by teachers, clinicians and parents toward the resolution of special learning problems in children at the preschool, elementary and secondary school levels. Classroom sequences of perceptual activities are presented, progressing from simple to complex activities.

Barch, Ray H. *Achieving Perceptual-Motor Efficiency: A Space Oriented Approach to Learning* Vol. 1, Special Education Publications, Seattle, Washington.

Introduces a model for curriculum organization for classroom, clinic and the home to enrich and improve the development of children with particular emphasis upon the child with special problems in learning.

Bateman, Barbara *Reading Performance and How to Achieve It*, Special Education Publications, Seattle, Washington, 1976.

Presented is a comprehensive range of current practice, thinking and research in the vital area of reading performance and how it can be achieved.

Bateman, Barbara and Haring, Norris *Teaching The Learning Disabled Child*, Prentice-Hall, Englewood Cliffs, N.J., 1977.

A primary methods text for teaching the learning disabled child. It represents systematic guidelines and instructional tactics commonly used by experienced teachers who are in contact with learning disabled children.

Bryant, Cathy J. *Some Educational Implications of Movement*. Special Education Publications, Seattle, Washington.

Outlines ways in which movement experiences may be used by children evidencing mild to severe sensory-motor deficiencies. Positive suggestion for the improvement of the child through movement are included.

Doward, Barbara *Teaching Aids and Toys for Handicapped Children*. Council for Exceptional Children, Publication No. 7, Reston, Virginia, 1960.

Describes construction and use of pegboards, puzzles for developing size and space perception.

Karnes, Merle B. "Creative Games for Learning." *Parent/Teacher Made Games*. Council for Exceptional Children. Publication No. 158, Reston, Virginia, 1977.

Fifty simple to make games that parents and teachers can construct. Each game teaches a very specific concept essential to cognitive skill development. Appropriate for children 3-8. Suggestions for modifying the games for exceptional and gifted youngsters are included.

ME NOW

Hubbard P.O. Box 105, Northbrook, Illinois 60062.

ME NOW is a two year science program on basic functions of the human body for special and learning disabled students ages 10-13. Activity oriented/multimedia materials. Success oriented approach fosters feelings of self-worth that increases as the student masters new concepts. Low reading skills present no barrier to progress in this program.

ME and MY ENVIRONMENT

Hubbard P.O. Box 105, Northbrook, Illinois 60062.

Developed by Biological Science Curriculum Study funded by the Bureau of Education for the Handicapped (BEH). ME and MY ENVIRONMENT, a three year course for Jr. and Sr. High School students, employs inquiry strategies to guide students sequentially through an exploration of their environment and their interrelationship with it.

Rosenberg, Marshall B. *Diagnostic Teaching*, Special Education Publications, Seattle, Washington.

A book for teachers presenting an inventory and description of types of learning styles in students and suggestions for adjusting teaching methods to meet individual differences in learning.

Schaff, JoAnne *The Language Arts Idea Book*, Goodyear Publishing Co., Inc., Pacific Palisades, Calif., 1976.

A collection of over 300 ideas and activities to provide the teacher with experiences for children, which will arouse their interest, and create a stimulating environment for acquiring important language skills, knowledge attitudes and appreciation.

"Teacher Idea Exchange: A Potpourri of Helpful Hints." *Teaching Exceptional Children*, Volumes 1-7, Council for Exceptional Children, Publication No. 130, Reston, Virginia.

Over 100 teacher tested ideas on instructional materials and techniques presented in convenient card format.

Thomley, Margo L. *Every Child Can Learn . . . Something*. Special Education Publications, Seattle, Washington.

A book that guides the parent or teacher of a severely mentally retarded child to develop the fullest potential every child has for learning.

Weinberg, Richard A. and Wood, Frank H. *Observations of Pupils and Teachers in Mainstream and Special Education Settings: Alternative Strategies*, Council for Exceptional Children, Reston, Virginia, 1975.

Mainstreaming

Cleary, Margaret *Please Know Me As I Am*, Jerry Cleary Co., Sudbury, Ma.

A Guide to helping children understand the child with special needs. Classroom activities for elementary school children interacting with special children are suggested. The activities are mostly affective experiences, enabling regular children to empathize with the special problems of other children.

Encyclopedia Britannica Educational Cooperation *Like You, Like Me Series*, Visual Education Center, Chicago, Illinois.

A series of ten animated films designed to help teachers facilitate the entry of exceptional children into nonrestrictive classroom environment. The films: initiate awareness of various exceptional conditions; present factual information about exceptional conditions; dramatize how young children adapt to exceptional conditions; encourage discussion of feeling and attitudes toward exceptional individuals; show that people have strengths and weaknesses; and provide positive models for acceptance of exceptional children into the classroom.

1. Let's Talk It Over (Epilepsy)
2. Let Me Try (Retardation)
3. Let's Be Friends (Emotional Disturbance)
4. Doing Things Together (Prosthetic Hand)
5. Everyone Needs Some Help (Hearing and Speech Impairment)
6. Why Me? (Double Braces)
7. It's Up To Me (Asthma)
8. See What I Feel (Visual Impairment)
9. When I Grow Up (Career Aspirations)
10. I Can Do It (Orthopedic Condition)

Fairchild, Thomas, et al. *Mainstreaming Series*. Learning Concepts, Austin, Texas.

Consists of six paperbound books ranging in length from 120-136 pages. Each book in the series addresses itself to one area of exceptionality providing several topic areas from which to choose. Each book provides information designed to correct misconceptions and to improve understanding the exceptional child's uniqueness.

1. *Managing the Hyperactive Child in the Classroom*
2. *Mainstreaming Exceptional Children*

3. *Behavior Disorders: Helping Children with Behavior Problems*

4. *Mainstreaming Children With Learning Disabilities*

5. *Mainstreaming The Mentally Retarded Child*

6. *Mainstreaming The Gifted*

Monaco, Theresa M. "Mainstreaming Who?" *Science and Children*. 13:11; March 1976.

This article assesses the possibilities of using science as a vehicle for mainstreaming exceptional children into the regular curriculum.

Siegel, Ernest. *Special Education in the Regular Classroom*. The John Day Company, Binghamton, New York.

This book deals with children who have been classified as mentally retarded, brain injured or emotionally disturbed. Some general definitions of their disorders are given, hopefully enabling the regular teacher to recognize children with special problems.

Diagnostic

Deno, Stanley and Phylliss Merkin. *Data Based Program Modification*, Council for Exceptional Children, Publication No. 160, Reston, Virginia, 1977.

A system that provides a means of evaluating alternative solutions to learning problems by means of charting progress/performance. Goals for individualized education programs focus on behaviors that are necessary for functioning in the least restrictive environment.

Barbe, Walter B., *Educator's Guide to Personalized Reading Instruction*, Prentice-Hall, Englewood Cliffs, N.J., 1961, pp. 142-143, 152-153, 160-161, 168-169, 182-183, 192-193 and 204-205.

Barbe has formulated a series of checklists which can be used in aiding observation of reading skills. These checklists begin at the reading readiness level and continue through the sixth-grade reading level. They cover such reading skills as sight word recognition, word analysis skills, comprehension, oral reading, silent reading, and rate of reading. They are extremely useful if you are going to use a individualized reading plan since they guide you in determining what reading skills should be stressed at each reading level.

Beery, Keith E. and Buktenica, Norman A. *Developmental Test of Visual-Motor Integration*, 1967, Follett Educational Corp., 1010 West Washington Blvd., Chicago, Ill., 60607.

The test involves copying increasingly difficult geometric forms and is particularly useful for assessment. Directions are clear for teacher administration but subjectivity can be a problem.

Directive Teaching Instructional Management System

Huelsman Clinic, DTIMS Project

371 Arps Hall

Faculty for Exceptional Children

Ohio State University

Columbus, Ohio 43210

The purpose of the DTIMS project is to facilitate the teachers role in providing individualized instruction in academic and social skills for learning disabled children. The model contains three basic steps (1) assessment, (2) instruction and (3) evaluation. The following products assist the teachers in developing an individualized instruction system:

1. performance objectives in math, reading, and social skills.
2. criterion referenced assessment tasks for each objective keyed to commercial materials.
3. criterion referenced teaching strategies for each skill.
4. commercial references for teaching and practice activities coded to each skill.
5. management strategies to be used in conjunction with instruction.

Hively, Wells and Reynolds, Maynard. *Domain Referenced Teaching in Special Education*, Council for Exceptional Children, Publication No. 101, Reston, Virginia, 1975.

Implications of domain referenced testing (also known as criterion referenced and objective referenced testing) for Special Education. Helpful for teachers, administrators, curriculum supervisors in making assessment part of their program.

Kallstrom, Christine. *Yellow Brick Road*, Learning Concepts, Austin, Texas.

The *Yellow Brick Road* is a screening instrument designed to identify functional strengths and weaknesses in preschool children. It is designed to follow the Wizard of Oz theme. Each of the four batteries contain six sub-tests. The batteries are: motor; visual; auditory; and language. It can be administered individually or in groups. Aides, volunteers, and parents can assist the examiner with the administration.

The Chapel Hill Training—Outreach Project

Kaplan School Supply Corporation
600 Jonestown Road
Winston-Salem, North Carolina 27103

The purpose of the Chapel Hill Training—Outreach Project is to assist early childhood, pre-school, and headstart teachers in diagnosis and programming for young children.

The Chapel Hill Training—Outreach Project contains: The Learning Accomplishment Profile (L.A.P.), Manual for the L.A.P., A Planning Guide, The Pre-school Curriculum (44 weeks of daily plans), Learning Activities

(295 activities), Working With Families, The Chapel Hill Model for Training Head Start Personnel in Mainstreaming Handicapped Children, A Model for Resource Services to the Young Handicapped Child in a Public School Setting, The Infant L.A.P., and "Here I am . . . Teach Me." There is also available a L.A.P. Diagnostic Profile Kit, Consumable materials, Technical Report and Filmstrips.

Leonetti, Robert and Muller, Douglas *Primary Self-Concept Inventory*, Learning Concepts, Austin, Texas.

"The Primary Self-Concept Inventory" is designed to identify children who have a low self-concept. Instruction can be given in English or Spanish. The instrument can be used as a pre- and post-test for program evaluation and as a screening instrument to identify children with potentially low self-concepts. The inventory yields a total self-concept score in three domains: social-self, personal-self, and intellectual-self.

Mann, Phillip and Suiter, Patricia. *Diagnostic Screening and Inventories*, Allyn and Bacon Inc., Rockleigh, N.J.

Six books designed to improve mainstreaming performance by providing techniques to help evaluate and record individual student progress. The books focus on the critical skills necessary for success in language and arithmetic and helps the teacher plan appropriate materials geared to the functioning levels of particular students.

1. Teachers Handbook of Diagnostic Inventories (Dup. Masters)
2. Teachers Handbook of Diagnostic Screening (Dup. Masters)
3. Handbook in Diagnostic Teaching
4. Children with Learning Behavior Problems
5. Education of Exceptional Learners, 2nd ed.
6. The Resource Teacher

Piers, Ellen V. and Harris, Dale B. *The Piers-Harris Children's Self-Concept Scale* (The Way I Feel About Myself) Grades 3-12, CSCS, 1969. Counselor Recordings and Tests, Box 6184, Acklen Station, Nashville, Tenn. 37212.

The test consists of 80 items, first-person, declarative statements—"I am a sad person, I am a happy person." The child answers yes or no. Half the test is worded to indicate a positive view of self, half a negative view. Confusing terms are avoided. The test can be read to younger children.

INSTRUCTION

After assessing the needs, strengths, weaknesses, task requirements, etc., the teacher makes major decisions concerning *what* to teach in order that objectives may be implemented and *how* to teach the identified content. This sequence in the individualized educational program refers to "how do I get him/her there." A discrepancy exists between what is already known (before instruction) and what the student knows after instruction. This discrepancy can be identified as the instructional component.

Teachers must ask themselves not only "How do I get him/her there" but what are the best strategies to implement in "getting him/her there." Other concerns include:

1. *Planning sequences* to accomplish the behavioral objective.
2. *Considering the conditions* under which the learning will occur. This consideration will depend upon:
 - the needs/requirements/level of the student;
 - the environmental requirements (i.e., style, abilities, structure of the learning, etc.);
 - competencies of the teacher.
3. *Designing the learning environment* for optimal interaction.
4. *Considering the materials* that compliment the method and reinforce concepts and learning styles, abilities, etc.
5. *Considering the motivators* for interest.
6. *Implementing the plan or design.*

Each area of the IEP has always been addressed by teachers heretofore; however, the goals and objectives were perhaps the only recorded elements of a plan. With the focus on IEP per se, it has become almost impossible to converge on those areas in which the teacher has the greatest impact—daily classroom programming. The numerous forms, writing, checking, monitoring, evaluation and administrative requirements have produced an apathy, disillusionment and a biased attitudinal set. It then becomes the responsibility of the teacher to plan a *realistic* design for meeting the needs of exceptional children.

INDIVIDUALIZING THE PROGRAM

One design for administering a program which maximizes the potential of every child is through individualization.

In order to meet the varying needs of children within the least restrictive environment, educators have come to a consensual agreement. The varied and numerous arrangements made for classifying, typifying, and grouping for instruction have resulted in diverse as well as homogeneous arrangements (i.e., exceptional conditions, developmental levels, age, test scores, etc.). The cognizance of heterogeneity, uniqueness, learning differences, interests, life styles, varying modalities, needs and developmental levels have provided the integral elements for implementing an individual program. The commonality of each strategy is the freeing from group pacing, and competition; hence, the emphasis is on individual interest and need, attending to learning styles and modalities, and moving a learner toward his optimum potential through a personalized process:

A program can have numerous strategies for considering goals, interests, modalities, abilities, motivation, strengths, weaknesses and other pertinent assessment data. The implication of such a program is that teachers, pupils, administration, faculty, community and parents become a part of the learning structure. The teacher and resource persons simply coordinate and facilitate the process of programming; thus guiding instruction, diagnosing, evaluating, prescribing and consulting for each learner.

A student-centered philosophy focusing on the learning process produces inherent desires in educators to plan and execute meaningful, effective and systematic programs. When teachers are included in a plan for instituting change for children, when non-threatening approaches are detailed, and when the process of individualizing makes the job of facilitation an easier task, then, productive interaction of teacher and program become a meaningful alternative.

Individualization of instruction, then, is a process of gearing the instructional program to meet the needs, interests, and abilities of individual pupils. The nature of the subject, needs of the pupil, and the purpose of the learning activity will determine the approach to be utilized.

The most important objective of individualization is to release the potential in the individual learner. Individualization might help expand this potential through a personalized educative process:

1. The emphasis is on the student, the teacher, and the interactive process.
2. The process of individualization occurs when a teacher recognizes and responds to the emotional reactions and the academic achievements (the learner is a whole person).
3. Individualization considers the uniqueness of perception, values, concepts, and needs of the individual student.
4. Learning opportunities are tailored to enhance individuality.
5. Awareness of individual demand and sensitivity to needs lend commitment and purpose to the process.

Children do not learn passively, at the same rate, at the same time, with the same modality, and at the same age. Each child is unique; thus, a personalized program should promote this uniqueness.

The State of Vermont has developed a student-centered philosophy of education which includes an integrated set of principles. The emphasis is based on the learning process as opposed to the teaching process:

1. Education should be based upon the individual's strong inherent desire to learn and make sense of his environment.
2. Educators should strive to maintain the individuality and originality of the learner.
3. Emphasis should be upon a child's own way of learning through the discovery and exploration of real experiences.
4. A child's perception of the learning process should be related to his own concept of reality.
5. A child should be allowed to work according to his own abilities.
6. Expectations of children's progress should be individualized.

Instructional Strategies

Critical in the implementation of an individualized instructional plan is the selection of appropriate instructional strategies. The teacher has available to him/her a range of options from which choices can be made. Choices may include:

- *Visual stimuli/cues presented to aid in task success*
 - drawing while talking
 - depicting a model of subject
 - pantomiming tasks while talking
 - using pictures, objects
 - using other concrete materials (i.e., films, filmstrips, slides, video-tapes, etc.)
- *Verbal cues/direction*
 - specific verbal directions
 - specific suggestions
 - taped directions
 - verbal instruction

- *Nonverbal cues*
 - pantomiming directions or request
 - gestures reflecting intent
 - body posturing
- *Manual direction*
 - physical manipulation through task
 - physical assistance for approximation of task
 - partial guidance with verbal cues
 - repeating and practice

The listed designs may take the form of:

- direct instruction
- lectures
- supervised practice
- audio-visual aids
- questions/answers
- examples
- modeling
- molding
- explanations
- demonstrations

The effective use of the above is, of course, dependent upon "teacher skill." Effectiveness is, perhaps, correlated with the following:

- Deviation from the prescribed design providing a greater flexibility for teacher and child.
- Ample time spent in direct instruction.
- The effective use of praise and reward systems.
- The use of parents as teachers and helpers.
- The ability to elicit oral responses from students.
- The emphasis on not covering materials predetermined as requisite, but mastery of a skill.
- Time spent drilling and allowing students to practice the skill for mastery.

In addition several suppositions must be addressed in order to design those activities which address instructional strategies.

1. Performance Level Established

It can be frustrating to try to teach an instructional sequence if the learner doesn't have the developmental, behavioral or attention skills (prerequisites) to implement the desired task.

2. Ascertainment of Differences and Learning Styles

It should be known which instructional approach will compliment the cognitive, affective, or psychomotor style of the learner.

3. Maintenance of Catalyst for Learning

Some form of motivation should be considered in each instructional sequence. The promotion of a positive attitudinal stance toward the learning may be achieved through:

- subject selection
- environmental stimulation
- learner input (physical involvement)

- valuing exercises
- tangible rewards
- reinforcement techniques
- games, materials, problems, etc.
- feedback strategies
- intrinsic rewards

4. *Sequence and Task Analyzation of Skills*

Skills may be sequenced according to the developmental and acquisition level of students. The organization of skills using a hierarchical approach allows for the identification of the simplest skills needed to enter a task.

5. *Demonstration of Skill Through Sensory Cue*

This method allows the student to know the expected outcome of the learning and/or behaviors to be exhibited. Modeling, physical manipulation, providing a sample, etc., would allow the student to know what to do or how to perform.

6. *Student Feedback*

This process allows the student to actively participate in performing the desired behavior. This task allows attention to be focused (continually) on the task. It also allows the student constant feedback on his performance.

7. *Teacher Attention to Performance*

The awareness of child performance allows for corrective intervention in order to eliminate incorrect behaviors and promotes qualitative performances. The child is allowed to engage in the desired task with attention given at critical times.

8. *Acquisition and Practice of New Behaviors*

Reinforcement of new learning is attended.

9. *Teacher Management Techniques*

Guiding instruction depends upon the general management skills of the teacher. The ability to organize, plan and execute instruction is closely related to general efficiency of program development.

A list of key aspects for an effective instructional program has been given to aid teachers in *Strategies for Teaching the Mentally Retarded* (Payne, Palloway, et al., 1977). These include:

1. *Flexibility* — the ability to use a variety of approaches for meeting specific needs.
2. *Variety* — the ability to present instruction through a mixture of methods with a maintenance of interest.
3. *Motivation* — the ability to provide children with a reason to learn with tangible and social reinforcement.
4. *Structure* — the ability to provide needed direction, organization, and teaching.
5. *Success* — the ability to provide opportunity for succeeding.
6. *The TEACHER* — the ability to provide needed strategies and obtain desired results.

PLANNING THE INSTRUCTIONAL SEQUENCE

It cannot be said too frequently that the IEP process requires a qualitative teacher. Nothing "new" has developed or been proposed for teaching the acquisition of a skill or the movement of an individual from a level of dependence to a level of independence (something good teachers have always done).

The instructional sequence does not begin with direct instruction. The following guide may aid in the development of systematic sequencing of the instructional format:

- Review of annual goals;
- Review of specific objectives;
- Refinement by assessment strategies;
- Analyzation of results;
- Preparation of intervention plan;
- Preparation of instructional materials;
- Implementation of plan;
- Progress checks/assessments;
- Charting/profiling of progress;
- Review/adjustment of intervention plan;
- Evaluation of plan—coordination of cyclical process.

1. *Review of Goals*

- Retain thrust of "why"
- Mediate between what is and what should be
- Reinforce general agreement

2. *Review of Specific Objectives*

- Visually profile components of objectives:
 - behavior
 - conditions
 - criteria
- Review applicability
- Obtain more information about the strengths and weaknesses of student(s)
- Pinpoint where student(s) may be developmentally for proposed planning

3. *Refinement of Assessment Strategies*

- Decide:
- Motivator to be used
 - Learning modality consideration
 - Reinforcers to be used

4. *Analyze Results*

- Review specific content, match according to results
- Review where student is, to pinpoint sequence of next step in process

5. *Preparation of Plan*

- Note teacher behavior
- Review previous skill (if any)
- Review of method to be used for instruction
 - demonstrating
 - direct instruction
 - supervised practice
 - explaining/examples

- modeling
 - audio-visual aids
 - guiding responses
 - Attention-getting devices, plans
 - Followup/appropriate practice plans
 - Prepare feedback plans
6. *Preparation of Materials*
- Decide level of skill
 - acquisition
 - proficiency
 - maintenance
 - Decide efficacy of material
 - Provide materials that compliment sensory input/output modality
 - Decide Reinforcement Technique
 - learning stations
 - training packages
 - etc
7. *Implementation of Plan*
- Use:
- specific teacher behaviors
 - specific teaching technique(s)
 - positive motivators, reinforcers
 - specific media and materials
 - student verbal input
 - student practice skills
 - Supervise practice
 - Provide corrective feedback
8. *Progress Checks/Assessment*
- Continue monitoring progress at specific skill level
 - Decide followup format:
 - demonstration
 - modeling
 - mixed practice
 - drill
9. *Chart/Profile Progress*
- Keep adequate records of progress
 - Construct mechanism for child to realize progress
10. *Review/Adjustment of Plan*
- Continue to review previous skills taught
 - Continue to assess skill development level
 - Note discrepancies
 - Change plan if needed
11. *Evaluation of Plan*
- Provide visual evaluation techniques for determining skill acquisition
 - Review criteria of objective
 - Provide other appropriate followup practices
12. *Begin The Cycle Again*
- Do all of the good things that worked

MODELS OF INSTRUCTION

Previous sections have outlined a number of areas to be included in the IEP process, along with considerations of various approaches for selecting instructional strategies that facilitate the implementation of an individual plan. An understanding of specific models of instruction may also help to expand the range of approaches available to the classroom teacher and can provide a structured framework to which the teacher can refer. Five major learning models are included for your consideration and added information.

1. The Taba Tri Tram Model

Hilda Taba (*Teacher's Handbook for Elementary Social Studies*, 1967) has developed an instructional model which consists of three cognitive tasks or intellectual processes:

Level I. = *Concept Formation* which involves the organization of information by:

- a. numbering and listing
- b. identifying common properties, making abstractions
- c. labeling, categorizing, determining hierarchical structures

Level II. = *Interpretation of Data* involves formulating generalizations or inductive reasoning by:

- a. identifying, examining similarities of selected areas, concepts, topics
- b. explaining identified information, cause and effect relationships, comparing, contrasting
- c. making inferences, implications, extrapolations

Level III. = *Application of Principles and Facts* involves deductive reasoning processes by:

- a. hypothesizing, predicting consequences
- b. explaining, supporting hypotheses, predictions
- c. verifying hypotheses, predictions

The model then would have the following schematic view:

Level III. = Application of Principles & Facts A(P) (F)

Level II. = Interpretation of Data (ID)

Level I. = Concept Formation (CF)

This method helps the learner by having questions, problems, tasks, etc., geared toward terminal performances by forming concepts, interpreting and comparing data by inferences, explanation, etc., and the guiding of learners in the application of previous learning.

2. Robert Gagné's Cumulative Learning Model

Robert Gagné has developed a model based on the learning theories of others and has postulated a scientific approach beginning with simple reflexive responses to problem solving behavior. (See *Learning and Behavioral Objectives*).

TYPE VIII
Problem Solving
 (Applying rules to solve problems)

TYPE VII
Rule Learning
 (Forming principles, rules)

TYPE VI
Concept Formation
 (Classifying, generalizing)

TYPE V
Discrimination Learning
 (Recognizing differences,
 remembering names of objects)

TYPE IV
Verbal Association
 (Chaining with processing)

TYPE III
Chaining
 (Sequencing responses)

TYPE II
Stimulus-Response Learning
 (Motor responses)

TYPE I
Signal Learning (Classical Conditioning)
 (Reflexes, involuntary responses)

3. Bloom's Taxonomy of Educational Objectives

This model is developed as a system of organizing levels of understanding from the least to the most complex. This arrangement of intellectual (cognitive) behavior into a hierarchy of six categories begins with simple association and becomes progressively more complex; therefore, each level is dependent upon the preceding level.

- VI. *Evaluation*: make judgements, criteria, evaluate, detect fallacies
 - V. *Synthesis*: (originality, creativity), produce new evidence, communication
 - IV. *Analysis*: identify related components, show relationships, distinguish fact from fiction, relevant/irrelevant
 - III. *Application*: apply understanding to solve problems in new situations without aid of directions or solution methods
 - II. *Comprehension*: transfer of information into meaning, interpret, paraphrase, imply, infer, extrapolate
 - I. *Knowledge*: statement of terms, facts, definitions, ways of doing things with no evidence of understanding
4. Each of the previous models cited establishes different kinds of learning and capabilities for and within the student. This hierarchal approach illustrates an emphasis

away from solely observable or external variables and/or behavior. The child progresses from one stage to the next. Success of each stage is equated with and dependent upon the degree of success in the previous stage; hence, a developmental theory of learning.

There are other theories which account for learning that have become popular within the last two decades. Piaget's Theory of Cognitive Development is a case in point. This theory evolves from a conceptual view of stages of development which are completed in adolescence. A summary of the four stages and their major characteristics follows (a more detailed account can be found in *Piaget's Theory of Intellectual Development; An Introduction* by Herbert Ginsberg and Sylvia Oppen, from which the summary material has been drawn.).

Summary of Piaget's Stages of Cognitive Development

Sensorimotor Stage (Age: 0-2)

Characteristics	Activities
Reflexive Behaviors	Objects for tracking
Simple motor functions	Objects for sensory stimulation (tactile, visual, auditory)
Primitive anticipation of future events	Action experiences (i.e., learning through doing)
Curiosity (interest in moderately novel events)	
Imitation of models	
Coordination of sensory modalities	
Beginning sense of separation of self and environment	
Generation of pleasurable actions	
Increasing use of language	

Preoperational Stage (Preconceptual Thought, Age: 2-7)

Characteristics	Activities
Growth of "mental image" construction	Care in handling toys
Language becomes increasingly abstract and is used to refer to absent objects and events.	Action-oriented toys
Development of Symbolic functioning	Show and Tell
Modes of reasoning involving simple memory, distorted thinking, transductive reasoning present (perception of a relationship between 2 or more concrete items where there is none)	Group activities for making things.
Egocentric	Emphasis on language/ thought — coordination approach
Inanimate objects believed to have life (animism)	Thinking games (same and different)
	Contrasts
	Simple classification
	Comparisons

Characteristics

Activities

Artificialism abounds
(everything is designed by man)

Difficulty in following rules while holding the belief that they are sacred and inviolable

Inability to consider several aspects of a situation simultaneously

Concrete Operational Stage (Age: 7-11)

Characteristics

Activities

Decrease in egocentrism

Shared group projects

Logical thinking and reasoning (higher forms)

Rule learning

Performance of more complex mental actions (transformational imagery)

Sorting, manipulation

Class trips

Mature classification organizational skills

Building activities

Reversibility and conservation understood

Development of skills in subject areas

Conceptual property of numbers understood

Formal Operational Stage (Formal Thought, Age: 11 —)

Characteristics

Activities

Formation of abstract symbolic relationships

Word puzzles, problems, experiments

Possibility dominates reality; thought is not solely bound by the observed (hypothetic-deductive reasoning)

Analyzation of problems

Thoughts about ideas (rational, mature, logical thinking)

Complicated higher-order mental structures present.

Integration of past intellectual operations

Advanced language development

Flexible intellectual capacity

5. Jerome Bruner's Patterns of Growth

Jerome Bruner views the intellectual growth of man as the result of the use of different levels of "tools." By tools Bruner means skills that are developed and which become enactive at different levels of cognition. A brief description of the 3 levels of tools follows.

1. **Motor Tools** — time and strength saving skills for the muscles.
2. **Iconic Tools** — attention saving skills in perception that become the basis for understanding our representative constructions (drawings, diagrams, etc.).
3. **Problem-Solving Tools** — reducing heuristics to help us to analyze and conceptualize on an abstract, symbolic level.

In addition, Bruner views language as a critical, yet general tool. Bruner also characterizes domains of knowledge in 3 ways, each of which affects the ability of the learner to master it:

- A) **Mode of Representation**
- B) **Economy** (the amount of information that must be held in mind and processed to achieve comprehension)
- C) **Power** (the generative value of a learner's set of learned propositions).

These modes differ in relation to age and style of the learner, and to different subject matters.

Any domain of knowledge may be further represented on several different levels.

1. **Enactive Representation** (a set of actions appropriate for achieving a certain result).
2. **Iconic Representation** (a set of summary images or graphics that stand for a concept without defining it fully).
3. **Symbolic Representation** (a set of symbolic or logical propositions drawn from a symbolic system that is governed by rules or laws for forming and transforming propositions).

In summary, Bruner's view of the learner and the learning situation is more general than specific in terms of a model. The information may prove useful, however, as an additional perspective on the individual needs of each learner.

SELECTING AN INSTRUCTIONAL APPROACH

In addition to the consideration of a specific learning model, the selection of an instructional approach that aids the teacher in planning and implementing the learner's program is important. In lieu of discussing specific instructional approaches, the following concepts might be considered during the selection process:

1. Decide the level of skill development — acquisition, proficiency, maintenance.
2. Decide the type of instruction model you wish to use (formal, if any).
3. Decide the kinds of methods you wish to employ:
 - demonstrate
 - explain
 - use riddles/games
 - use audio-visual aids
 - use direct instruction

- lecture
- use questions/answers, etc.
- 4. Decide motivators and attention-getting tactics.
- 5. Include the child through active participation in the teaching-learning process.
- 6. Combine sensory strategies (i.e., tactile with visual, auditory with visual, etc.).
- 7. Present information in a logical sequential order. The organization can be important.
- 8. Demonstrate skills when it is necessary or use other cues/prompts.
- 9. Supervise the practice of a skill.
- 10. Provide immediate feedback to the child. Be certain it is done positively.
- 11. Reinforce the acquisition of skills through the use of:
 - parental support
 - positive reinforcers
 - learning stations/packages
 - self-correcting exercises
 - pertinent home assignments
 - independent assignments
 - peer tutoring
 - interesting individualized assignments
 - learning games
 - independent activities
 - field trips.
- 12. Follow-up the acquisition of skills through:
 - mixed practice
 - one-page assignments
 - extending activities
 - additional demonstrations
 - drills
 - methods of practicing skill.
- 13. Remember to use specific techniques at the acquisition, proficiency or maintenance levels.

MANAGING ASSIGNMENTS AND INSTRUCTION

Managing classroom instruction and activities requires skill, patience and thorough knowledge of the needs of individual children. The recordkeeping required of the IEP process demands a discovery of simplified planning. A few suggestions are offered to help the general planning of assignments and instruction.

Use of Folders

The invention of the folder (any kind) was a blessing to teachers. These simple objects can perform many space-saving/time-saving "miracles." Here are some suggestions:

1. Place captions on outside cover of folder and make learning activity pockets (numbered and sequenced).

2. Set up learning stations with large (commercial) pockets which can hold from three to four folders. Number the folders (in sequential order) for specific assignments.
3. Make individual folders (with child's name) for daily work assignments. Individual assignments can be placed in folder and child knows to remove assigned paper without help from teacher (time saver).
4. Separate multi-level assignments in specific skill areas by placing sets in individual folders.
5. Make an IEP folder which holds and/or records progress sheets.
6. Use folders to hold puzzles. Have specific markings or instructions on front.
7. Place dittos assignments along with a tape for a daily lesson (one in which the teacher can't be physically present).
8. Use folder for special assignments. Child does individual project when assigned.
9. Devise "Substitute Folder" system. Place assignments in folder that the child can use when teacher is out of building.
10. Devise "Tutoring Folder" which can be used to help develop skills. This gives specific instructions and suggested activities for the volunteer or "cross-age" tutor.
11. Use folders to hold word cards, math cards, counters or practice materials that are used daily.
12. Hang folders in accessible places for sheets (reinforcement) or activities which can be done independently.
13. "Parent Helper Folders" can be used as an "envelope" between parents and teachers. The skill to be reinforced at home is placed in folder and "sent" between home and school.

Use of Learning Centers

These centers help supplement the daily instructional program. Many books are available for setting up centers. Here are a few techniques to add to the "Save the Teacher Club":

1. Don't change the complete station at a center. Set it up so that titles, captions, etc., are general enough to be left up for several assignments (e.g., Word Fun, Dictionaryitis, Workshop Magic, etc.). Animal pictures, children, etc., can "hold" folders or assignments to be done by the child.
2. Set up stations that reflect thorough planning. If a child can do the assignment(s) in five minutes, it's probably not worth the hours of setting it up.

3. Set up stations that are multi-level, multi-sensory and simple to change. Not only should "paper assignments" be used, but also manipulative devices.
4. Set up some stations that promote independence. Allow children to help themselves (i.e., turning filmstrip, using language master, etc.).
5. Set up some "reward" stations. A prize can be given for engaging in individualized activities that the child needs.
6. Integrate the use of stations within the general instructional program. Systematic planning can help (children #'s 1 and 2 at 9:45; Group 3 at 1:30 at the Language Center, etc.).

Use of Home Study Sheets

These sheets allow the teacher to do preplanning when groups or specific children are involved.

Use of Chalkboard Plan

This plan is a visual device to help structure the day. These general areas can be specialized, but the parameters are set for teacher and child structure.

Room Organization

Many books and suggestions are available for structuring the physical environment. Some tips are:

1. Provide an instructional area near a chalkboard, racks, etc.
2. Provide a quiet area where a child can be alone (with and without choice).
3. Provide a space for recording of IEP materials which reflect:
 - profiles
 - checklists
 - charts
 - goals/objectives
 - etc.
4. Provide an individualized conference area. This is a spot that is "special." The teacher devotes a set limit of time with each student at that particular area. He/she "belongs" to that student and should not be disturbed for a certain length of time (5-7 minutes).
5. Place chairs, tables, mats in such a way that the arrangements are conducive to small group teaching if necessary. This helps to control movement by large groups.

Some additional selected references for examples of other approaches are:

Inductive/Discovery Approach

Gilstrap, Robert Land, William R. Martin, *Current Strategies for Teachers*, Goodyear Publishers, Pacific Palisades, California, 1975.

Meyen, Edward L., Vergason, G. A., Whelan, R. J., *Alternative for Teaching Exceptional Children*, Love Publishers, Denver, Colorado, 1975.

Precision Teaching

(Diagnostic Prescriptive Teaching) may be found in: Journal of: *Teaching Exceptional Children*, Spring 1971 Council for Exceptional Children, Reston, Virginia.

Modularized Instruction

Individualized Instruction may be found in: C. M. Charles, *Individualizing Instruction*, CV Mosby Co., St. Louis, 1976.

Use of Games

Simulation Instruction may be found in: Maidment, Robert and Russell H. Bronstein, *Simulation Games: Design and Implementation*, Charles E. Merrill, Columbus, Ohio, 1973.

SUGGESTIONS FOR TEACHING: MODIFICATIONS AND ADAPTATIONS

The previous sections have discussed concepts, models and approaches applicable to the general learner. Additional modifications and adaptations specific to an area of exceptionality need to be considered when planning an instructional program.

Included is a listing of the various exceptionalities, along with suggestions that may further aid the teacher in the process of planning and implementing an individualized instructional plan.

Gifted and Talented

Assumption: Acceptance and valuing of the uniqueness of perceptions, achievement capacity and intellectual curiosity aid in the development of independence.

Implementation:

1. Identify by multiple means:
 - assessment of intelligence
 - achievement
 - creativity/divergent thinking
 - anecdotal records
 - biographical data
 - checklists, behavioral scales
 - superior ability in one or more academic content areas.
2. Reward varied talents.
3. Help student recognize value of talents.
4. Develop creative acceptance of student's limitations.
5. Develop pride in achievement.
6. Reduce isolation of the gifted.

7. Exploit opportunities of the moment.
8. Allow chances to use what is learned with student's best abilities and "his/her" way.
9. Develop intellectual curiosity by promoting purposes for learning.
10. Build imagery bank, investigate and explore varied means of materials presentation.
11. Develop key phrases for evaluation. (When are "we" on the right track (not you)).
12. Allow time for observation and examination of the unusual.
13. Allow for questioning, intellectual curiosity, inquisitiveness and exploration.
14. Allow for creating, brainstorming and "free-wheeling."
15. Provide emotional support and empathy for ego-involvement.
16. Allow for diversity of interests and abilities. Hobbies and proficiency in art forms are sought.
17. Provide individualized work, freedom of movement and action; there is a need for invention.
18. Provide for early mastery of basic skills. Allow for the building of basic competencies in major interest areas.
19. Aid in the development of social relationships.
20. Allow for alternatives in presenting assignments. There is a willingness for complexity.
21. Present material that promotes abstraction, conceptualization, synthesis, evaluation and analysis rather than memorization, recall and translation.
22. Provide problem-solving situations that allow for reasoning, logic, implications and consequences. (Concentrate more on the *why*, rather than merely on the *what*.)

Hearing Impaired

Assumptions: The degree of hearing loss will influence the program changes. Student may be distracted easily by extraneous noises. May appear frustrated.

Implementation:

1. Face the class or student when speaking.
2. Aid your speech through body language (i.e., gestures, pointing, illustrations, etc.).
3. Speak clearly and slowly (avoid exaggerated lip movements).
4. Use visual aids that will assist in presenting ideas, concepts, etc.

5. Limit amount of external noise; allow student(s) to work in quiet areas or use headphones if necessary.
6. Pair the student with a normal hearing student.
7. Allow for a minimum of distractions.
8. Provide visual cues for directions (i.e., on, off, left, etc.).
9. Use simple sentences and pictures/aids (to facilitate language) and constant explanations.
10. Use repetition and time to allow for visual and/or tactile processing of a concept.
11. Encourage the expression of language in some form.
12. Be consistent in presentation of concepts (e.g., consistent use of cat instead of kit, kitty, kitten, etc.).

Mentally Handicapped

Assumptions: There is a need for concrete experience rather than abstractions. Repetitions are necessary.

Implementation:

1. Use programmed materials.
2. Task-analyze all skills.
3. Commercial materials should be modified.
4. School day and programs should be systematized (repetition).
5. Use audio-visual aids.
6. Give reinforcement and reassurances often.
7. Maintain a climate of support and positively reinforce attempts at successful completion of tasks.
8. Allow additional time for the student to complete work.
9. Use materials and/or books which are specifically designed for slow learners.
10. Adapt environment so each child can be included.
11. Continually communicate your pleasure with and praise for the child.
12. Use concrete examples and modeling of the expected before making demands.
13. Explain things as they happen to allow for processing of the abstract with the concrete.
14. Encourage independence.

Multiply Handicapped

Assumptions: Adaptation to classrooms are needed to deal with physical limitations. The pervasiveness of different conditions may affect each child in a different way.

Implementation:

1. Make environmental changes that are advantageous to the student for accessibility.

2. If limited use of the limbs exists, pair the student with a peer.
3. Get as much information as possible on the physical disability.
4. Use media and material adaptations (e.g., typewriter, recorders, etc.)
5. Place materials at heights that are advantageous to the student.
6. Modify the equipment to accommodate the student needs (despite the exceptionality).
7. Provide an adequate time period to get to/from class, take care of needs and get assignments completed.
8. Use audio-visual aids to compensate for the exceptionality.
9. Allow associative activities by modifying the situation to accommodate the exceptionality.
10. Provide time to compensate for physical restraints, thus promoting independence.
11. Bring situations, groups activities, etc., to the child if he is physically unable to come to the situation.
12. Use the vocational education department to modify equipment needed.
13. Help students set realistic goals.
14. Use the vocational counselors.
15. Allow peers to become sensitized to the exceptional.
16. Move from simple skills to more complex ones.
17. Use students' ideas to increase program participation.
18. Reward class participation.
19. Limit written materials if necessary.
20. Pair the student with a non-exceptional student to provide support.
21. Adapt the environment as much as possible to accommodate the exceptional.
22. Help the child to verbalize his needs and to help care for her/himself.
23. Use the time of remission of the impairment to capitalize on important teaching activities.
24. Help build the self-concept of the health impaired child.
25. Remove the pressure of demands upon students that he/she is unable to attain; praise the level of attainment.

Emotionally Handicapped

Assumption: This label should not connote retardation.

Implementation:

1. Remove extraneous materials or distractions.
2. Minimize failure through reinforcement.
3. Provide a "buddy" for the shy student.
4. Respect and support the child.
5. Allow the student to understand the correlation of behavior and its consequences.
6. Provide many opportunities for success.
7. Minimize frustration by having periods of learning based on attention span and skill level.
8. Provide for the student to have the medical counseling services he/she needs.
9. Provide systematic schedules for the child rather than changes that promote confusion.
10. Use learning strategies that are appropriate for the skill level of the child and promote success.
11. Provide adequate reinforcers that promote conformity.
12. Be consistent in your management of the child's behavior.
13. Observe the behavior during periods of stress and note the preceding and provoking behavior.
14. Progressively increase the group size for aggressive children as they develop the ability to handle the skill or social area.
15. Use appropriate cues to accompany assignments.
16. Limit amount of external noise; allow student(s) to work in quiet areas or use headphones if necessary and limit the amount of visual distraction.
17. Use programmed materials.
18. Task-analyze skills.
19. Maintain a climate of support and positively reinforce attempts at successful completion of tasks.
20. If using manual communication techniques, pair the gestures with simple concrete words.
21. Don't demand more of the child when he is attempting his best; reinforce, praise, etc.
22. Always capitalize on the child's strength.
23. Utilize manipulative devices (initially) to provide a basis for speech.
24. Become aware of the type of disability (if possible) the student possesses.

25. Become aware of the behaviors that interfere with learning.
26. Find the best modality for teaching the child and supplement the regular materials.

Specific Learning Disabilities

Assumption: Many behaviors interfere with learning.

Implementation:

1. Become aware of the type of disability (if possible) the student possesses.
2. Become aware of the behaviors that interfere with learning.
3. Find the best modality and supplement regular materials.
4. Reinforce behaviors that are conducive to learning (find out reinforcement needed).
5. Use high interest materials.
6. Use visual cues to accompany assignments that may be oral.
7. Use strategies from the concrete to the abstract.
8. Use words within the child's vocabulary level rather than arbitrary word lists.
9. If using manual communication techniques, pair the gestures with simple concrete words.
10. Allow the child time to point to the objects or things that can be shown if he is unable to verbalize his intent.
11. Record any progress (or lack of it).
12. Don't demand more of the child when he is attempting his best, reinforce, praise, etc.
13. Always capitalize on the child's strength.
14. Utilize manipulative devices (initially) to provide a basis for speech.
15. Use yes and no questions to extract language.
16. Play records or read stories for sound differentiation (raising of hand, patting feet, etc.)
17. Begin with one step directions and lengthen the requirements.
18. Play sequence games to enhance receptive language.
19. Play descriptive games (one child describes object, other child chooses).
20. Strengthen memory by saying lists of numbers or alphabets, and having them repeated.
21. Have children act out parts of stories.

22. Promote singing games and/or records that require following directions.

23. Role play situations for older students which help them become functional (i.e., interviewer, employer, etc.).

24. Use "show and tell" activities.

25. Have children create their own stories and poems.

Speech and Language Impaired

Assumptions: Oral expressions are able to affect performance. Rejection is felt quickly.

Implementation:

1. Attention must be given to student's self concept.
2. Provide an atmosphere wherein the student will be comfortable.
3. Allow the student to listen and imitate a good model or provide a compensatory speech pattern.
4. Allow for success in another discipline to compensate for problems in speech.
5. Devote attention to the child when he/she is speaking.
6. Use a one-to-one setting as much as possible.
7. Reduce extraneous pressures on student(s).
8. Don't call attention to the student's problems or ridicule him/her.
9. Work with therapist and reinforce activities, skills, concepts suggested and used by therapist.
10. Reinforce receptive language with expectation for the expressive.
11. Provide visual, tactile and other experiences that don't always require the use of verbal interaction (multi-sensory approaches).
12. Work with parents to reinforce activities at home and at school.
13. Allow the child to have a partner to help reinforce patterns learned in therapy.

Visually Impaired

Assumption: Special and or supplemental materials will be needed to compensate for visual problems.

Implementation:

1. A typewriter and tape recorder are necessities.
2. Use mobility training to insure independence.
3. Use very large (primary) type for materials to be read.
4. Use the auditory and tactile channels for learning and/or assignments.
5. Use the overhead projector regularly (to enlarge type, pictures).

6. Read aloud to the student or provide a "buddy" to aid in reading.
 7. Have student close the eyes and listen when annoyed or distracted by extraneous visual stimuli.
 8. Use magnifiers.
 9. Use talking books and magnifiers.
 10. Use auditory signals as much as possible.
 11. Teach class to aid student by identifying themselves and objects.
 12. Allow the child to do many things for her/himself.
 13. Arrange the environment in order to encourage movement and familiarity.
 14. Always try to respond (in some way) to requests.
 15. Explain the environment in which the student is moved, then drill in responding through movement to voice commands.
 16. Read aloud to the child, have questions answered, sections retold.
 17. Use the language master machine for spelling, math, giving directions, etc.
 18. Play "texture" and "what's in the bag" games to strengthen tactual awareness.
 19. Have descriptions and interpretations of auditory or tactile stimuli.
 20. Use a phonic approach to spelling and other reading activities.
 21. Build concept by analogous relationship items.
 22. Use puzzles that are large for finger tracing.
 23. Use objects for sorting to teach "same and different" concepts.
 24. Encourage the verbalization of ideas.
 25. Teach word association cues in order to strengthen memory.
 26. Use kinesthetic teaching aids such as tactiform pictures, symbols, letters, raised maps and globes.
 27. Use kinesthetic approaches when they lend themselves to the acquisition of a skill such as charades, pantomiming, etc.
 28. Use choral reading as an activity to encourage class inclusion.
2. Retention of concepts can be enhanced by verbal associations and labeling.
 3. Overlearning and repetition of a skill can help the retarded acquire, master, and retain a skill.
 4. Drawing a child's attention to specific relevancies or attending to specific features of a stimulus can be used.
 5. Instruction should be presented without extraneous stimuli that promote distractibility (use cubicles, overhead projectors, etc.).
 6. Presenting materials from the easy to the difficult enhances transfer of learning.
 7. Sequencing of facts and concepts helps children retain the learning.
 8. Modeling as a teaching technique can promote desirable behaviors and skill acquisition.
 9. A variety of methods for presenting materials (as well as reinforcing a skill) should be used.
 10. Try to include the exceptional child in activities enjoyed by other class members.
 11. Using multi-sensory approaches may aid in the acquisition of a skill.
 12. Coordinate and reinforce the skills of the classroom program and the resource program.
 13. Using simple explanations (sentences) can help to clarify concepts if a concrete example is not available.
 14. Using whatever strengths a child possesses can aid in the exploration of additional strengths.
 15. Using peers to help reinforce skills will be a help to the exceptional child and the peer.

TIPS FOR TEACHING

Regardless of the specific exceptionality, a particular child may rely on one modality more than another (visual vs. auditory) in the learning process. Depending on the individual needs of the learner, the following recommendations may prove useful.

Visual Learners (Auditory Problems)

1. Write directions as a reminder.
2. Model the skill to be taught.
3. Show movies, slides, filmstrips, or use pictures for conceptual development.
4. Allow student to use visual approaches to reading (i.e., whole word, configurations). The visual learner using a phonetic approach. Other intensive methods will have to be used to use sound/symbol association.

GENERAL TIPS FOR INSTRUCTION

1. Remember to present concrete experiences rather than abstractions in the teaching of a skill.

5. Use "families of words" to help in discrimination of short and/or long vowel sounds.
6. Don't expect great success in tasks that require memorization such as poems, numbers, addresses.
7. This kind of learner will show serious spelling problems. References will have to be individually planned as aids.
8. Try allowing the child to read more silently than orally.
9. Drill the student using sequential tasks (e.g., A-B-C-D, repeat).
10. Use rebus stories as an aid.
11. Use charts, maps, experience stories to help with encoding.
12. Use dictation exercises often.
13. Give oral directions for a visual stimulus (e.g., find the word _____).
14. Try to show differences in ideas as a teaching point (e.g., tricycle, automobile).
15. Reinforce time concepts (e.g., tomorrow, today).
16. Teach association skill intensely (e.g., opposites).
17. Use stories "in the round" for sequencing.
18. Use analogous relationship pictures and proceed to words.
19. Use "imitation" games.
20. Try talking to child in a stationary position rather than while moving.
21. Try to screen out excess noise while the child is working.

Auditory Learners (Visual Problems)

1. Give ample time for visual assignments.
2. Give auditory clues along with visual presentations.
3. Positively reinforce for modification techniques involving attention span and/or hyperactivity.
4. Make/use markers and liners as guides on papers and/or reading materials.
5. Give exercises differentiating figure-ground.
6. Reinforce discrimination (visual) in lessons.
7. Avoid extraneous visual stimuli.
8. Sometimes test using auditory responses.
9. Use puzzles beginning with a few pieces and proceed using more.
10. Allow tracing objects/letters, writing in sand, and other tactile methods to reinforce the visual learning.

11. Encourage the use of the phonetic approach to reading.
12. When giving written assignments be certain to space well and keep the paper simple and uncrowded.
13. Give visual tracking exercises.
14. Allow the child to tell stories and have them copied as he/she talks (e.g., experience stories, others).
15. Encourage cutting of pictures and make words to match pictures.
16. Use colored chalk to separate chalkboard assignments.
17. Allow the child to be seated near the chalkboard for copying.
18. Use the tape recorder and a "buddy" to interpret/aid assignments.
19. Use records for stories with a follow-up assignment.
20. Use movement activities to enhance teaching.
21. Promote the observance of simple environmental stimuli.
22. Reinforce concepts of shape, size.
23. Model visually while giving auditory directions.
24. Have the child write or draw pictures from dictation or description.
25. Try to engage child in visual games (e.g., Follow the Leader, Do What I Do, etc.).
26. Encourage picture interpretation.
27. Play games such as "Show and Hide," have child tell two things he saw in picture.
28. Present auditory stimulus and simultaneously present visual stimulus.
29. Use a "window" to block other words while reading or use book marker.
30. Don't overcrowd words, pictures on papers or boards.
31. Experiment with visual tracking exercises.
32. Reinforce a phonetic approach to reading.
33. Color cue papers to aid discrimination.
34. Use dictation of single letters or underlined words within words to aid discrimination.
35. Give tests orally.
36. Continue training in perceptual forms.

INDIVIDUALIZING TIPS

A multitude of methods and approaches for individualizing an instructional program have been presented for your

"synthesis" and ultimate use. Practical tips for classroom management are also included, and selection of appropriate program management techniques will depend on the child(ren) involved and the style of instruction with which a particular teacher is most comfortable. The list is not intended to be all inclusive and as you read through it, you may want to include additional suggestions of your own.

1. Collect magazines for many curricular area assignments.
2. Plan work by making work folders for children.
3. Collect scope and sequence charts, math or reading skills charts; cut and paste relevant sections for sequential developmental steps.
4. Plan some work according to the amount of time spent with individual children. Self-directed children can be given three-day assignments; others one-day assignments.
5. When visiting the bookroom, select several books from different series rather than a book for each child from the same series.
6. Prepare file cards of the following:
 - physical education motor activities
 - pictures
 - arithmetic problems
 - reading assignment in specific skill areas in sequential order
 - dictionary skills
 - writing skills
 - book sharing ideas
 - thinking activities
 - creative drawing ideas
 - recipes for cooking
 - language tasks
 - art activities
 - collection ideas
 - newspaper ideas
7. Provide a time during the week for special interest time.
8. Color code cards so that children can identify the level of difficulty.
9. Provide partners for children to answer questions, read directions, tutor, listen and direct.
10. Have children dictate and write stories for reading instead of attempting to always use traditional texts.
11. Allow the child to use his own (known) words to create his sight vocabulary in reading.
12. Teach children to create daily records (diaries) in order to spark interest in writing. They can write about what they do, books they like, etc.

13. Allow children to write their own poems in addition to learning poems written by others.
14. Allow children to write notes, cards and letters to family, friends and classmates.
15. Allow children to share products, books, etc., from home to stimulate language.
16. Devise a schedule whereby each child has a private time with the teacher. No one can interrupt during the private time.
17. Schedule arithmetic problems around those devised by the children or practical ideas that will aid the children in solving everyday problems.
18. Provide activities that are high in personal interest.
19. Involve the child in program planning.
20. Prepare learning stations or learning folders with multi-level assignments in order that several children can use a variation of the same material.
21. Prepare "Reward Stations" that have "prizes" for completion.
22. Use the following techniques for getting shy children to talk:
 - responding to tapes (record responses)
 - reverse interviewing
 - explaining answers/assignments to the teacher or partner
 - repeating messages from parents
 - acting as class messenger
 - "talking" schedules
 - sharing personal objects
 - finding areas of interest and report orally
23. Buy blank filmstrip and have children make their own.
24. Buy blank slide material, have children share assignments by showing their own slides.
25. Allow children to help prepare their own schedules of work and the time in which to complete the work.

General Instructional Practices

1. Keep assignments, lessons, instruction meaningful.
2. Always begin with what the student knows when planning instructional activities.
3. Continually evaluate your instruction.
4. Individualize the pacing of instruction.
5. Always praise and encourage.
6. Provide immediate feedback and return assignments.
7. Allow students to help in planning activities and share in the instructional format.

8. Supplement your instructional activities with outside resources (i.e., speakers, trips, agencies).
9. Use many supplemental aids, ideas to develop a skill (not just paper work).
10. Always respond to students in a positive manner when they have addressed a part of the instructional program. Seek their participation.
11. Stop using any technique (given sufficient time) if it is not successful.
12. Watch for signs of boredom.
13. Demonstrate concepts to be learned.
14. Establish (with students) purposes of instruction or activities.
15. Give simple concise directions that are understood (give gestures or signs if necessary).
16. Teach for success, lower pre-requisite skills if necessary.
17. Organize and systematically reach for transfer of learning.
18. Provide short practice periods.
19. Encourage, accept, and value all contributions.
20. Provide many opportunities for acquiring a skill.
21. Consider the type of disability when selecting instructional plans (sensation, imagery, etc.).
22. Teach to the level of interest and organize for active participation.
23. Make instruction and assignments fun for the child. If a child enjoys what he is learning, interest will increase.
24. Show patience but be forceful in encouraging success.
25. Emphasize both the verbal and non-verbal teaching strategies.
26. Allow for group activities if this reinforces skill to be taught.
27. Organize and supervise each lesson period. Demand good discipline. Be firm and fair.
28. Include the exceptional in activities by modifying or adapting the program.
29. Involve motor activities whenever possible.
30. Use a variety of techniques such as role play to help students.
31. Use clarification techniques for any new words, concepts, etc.
32. Use repetition and practice in teaching skills.
33. Use multi-sensory materials and techniques where applicable (always teach through the best sensory mode).
34. Use a variety of presentation modes to present materials.
35. Capitalize on student ideas.
36. Involve parents in follow-up and homework activities. Parents can help to reinforce what you've taught.
37. Provide routine in going from one activity to another. Children need to establish patterns from daily expectancies. Lack of preciseness might lead to wasted time, chaotic transition periods.
38. Use music during the course of the day or as a transition mechanism. Music sometimes acts as an indefinable mechanism which produces positive results.
39. Study levels and plan accordingly. Think of the energy, motivational levels and differences of children during your planning sessions. Consider the child's tolerance level or "saturation point."
40. Use task analysis. This helps insure success.
41. Use grouping patterns. Let "slower" children work in pairs or teams with "faster" children (read, study, discuss, playing games, etc.).
42. Use games. Teach skills through the use of games. This provides challenge.
43. Use a child's strengths. This assures him/her a sense of success. He can do some things well.
44. Don't overtest (formally). Teaching to a child's strengths sometimes builds the needed confidence for success.
45. Provide a humanistic milieu. Acceptance and valuing children promote a supportive climate for learning.
46. Emphasize both verbal and non-verbal learning. Teaching to deficits alone is a limited technique.

CHAPTER 6

REEVALUATION

Laws are unable to mandate qualitative individualized educational programs. Teachers are realizing that the efforts they expend daily will have more meaning when they have some mechanism through which they can document a child's progress (or lack of it), assess their interactive styles, evaluate instructional techniques, and assess the general impact and effectiveness of the goals and objectives.

The acknowledgement of a need for an evaluative mechanism as a *helpful* resource might aid in bringing about qualitative programming for exceptional children rather than present a conception of a negative accountability device for documenting student attainment levels.

Reevaluation can be defined as a process for determining if goals and objectives have been met. It is a mechanism for identifying the effectiveness of the prescribed goals, objectives and instruction. It enables the teacher to find the *discrepancies* between projected expectations and actual results. It allows for appraisal and significant study of:

- the appropriateness of the placement;
- the appropriateness of the goals and objectives;
- the attainment or non-attainment of goals and objectives;
- evidences for changes in programmatic procedures;
- the extent to which techniques matched:
 - needs
 - styles
 - levels
 - interests
 - skills;
- the kinds of services received (if any) and the appropriateness of such services;
- the need for altering any educational tasks/procedures;
- the priority development of skills as assessed by needs;
- concise information relevant to additional planning;
- the conditions which produced the positive or negative influential factors;
- the problem areas that must be attended;
- programmatic strengths and weaknesses.

Teachers will indeed wish to know what works and what does not work in order to revise, review and reprogram. A summarization of the "whys" of evaluation would include the following questions:

1. Was a problem properly identified?
2. Was a proper placement made?
3. Were goals and objectives adequately chosen and written?
4. Were management and instructional techniques adequate?
5. Were goals and objectives achieved?
6. Are there measures for the growth rate?
7. Was information gathered in a number of ways?
8. Were formal and informal evaluation techniques used?
9. Were objectives continually modified?
10. Were objectives in the affective domain considered?
11. Were the objectives chosen from the sequenced group those objectives that were prioritized as the most important?
12. Were the evaluation strategies designed to test objective achievement or reading ability?
13. Were recording devices adequate for charting progress?
14. Were prerequisite skills identified and implemented?
15. Were the steps small enough to achieve the objective?
16. Were the appropriate materials applied to instructional provisions?
17. Were the special services implemented in time to be useful?
18. Were there reasonable instructional strategies to implement objectives?
19. How could the strategies be changed?
20. What other gains occurred in areas which were not included in the specified objectives?
21. Was the IEP followed by the teacher(s)?
22. What revisions are necessary to provide adequate achievement of goals and objectives?

The reevaluation can be considered twofold. Formative or process evaluation, that which continues throughout the year, assesses the efficacy of the program as designed for specific children. Summative or product evaluation can be considered the annual review of the entire program pro-

cess. The effectiveness of the IEP must be considered on both levels. The daily monitoring of the IEP can be characterized as process evaluation. Methods by which this may be done include:

- precision teaching
- charts
- anecdotal records
- teacher-made tests
- other criterion-referenced tests
- continuous review
- progress charts and graphs (visual)
- input from teachers (subjective views)
- reevaluation of student progress in terms of prescribed goals and objectives
- complement of materials and other resources for achieving goals and objectives
- profile sheets with color codes
- coded sheets
- objective sheets with checks
- listing of goals, objectives and a checklist
- methods.

These suggestions may aid in achievement of a systematic plan for continuous evaluation of the IEP process.

1. SCHEMA FOR REEVALUATION

Individualized Educational Program

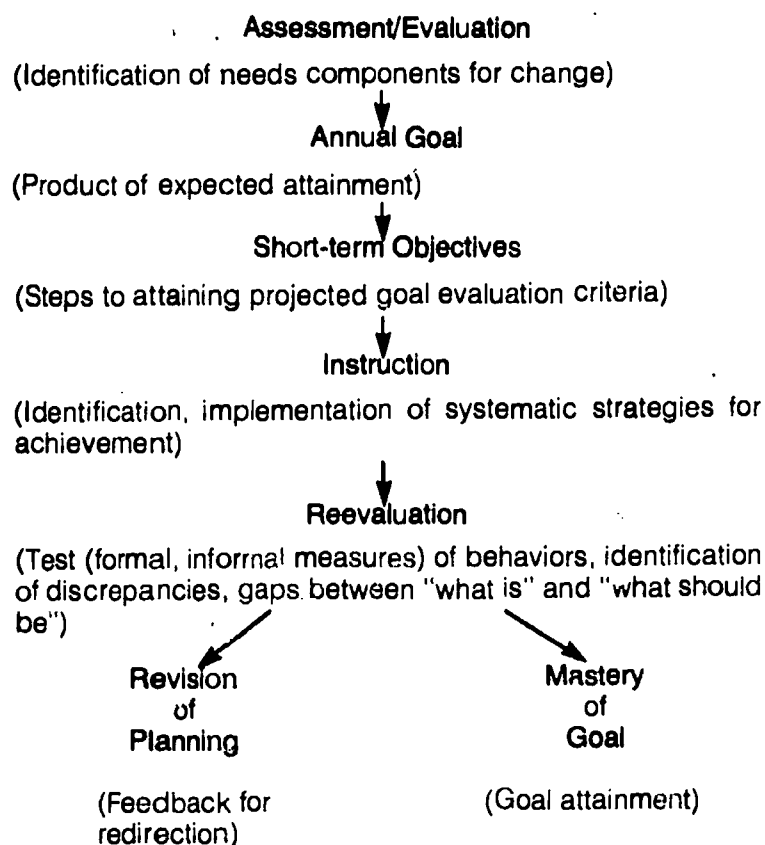


Figure 2.

This plan can be used as a model for continuous review of the effectiveness of the program assigned for moving a child to levels of independence.

2. SCHEMA FOR REEVALUATION

Step 1

Decide needed information

Step 2

Decide
technique for
acquiring information

Criterion
referenced measures

Norm-referenced
measures

Informal
strategies

Formal
Strategies

Step 3

Collect needed data

Step 4

Analyze data

Objective/subjective
reports

Charts, profiles,
checklists

Step 5

Record data

Step 6

Summarize Evaluation

Figure 3.

This plan can be adapted to specific teacher need for formulating an evaluation procedure.

Another method by which reevaluation can be considered includes the use of norm-referenced devices and criterion-referenced devices for assessing the effectiveness of instruction and/or mastery of objectives.

Norm-referenced evaluation refers to a process designed to ascertain a child's preference in relation to per-

formances of other children on a given test (normative group). It is a relative comparison to the manner in which others performed.

Example:

Johnny Jones completed more addition problems than did other students.

There is no definitive statement of the quality of the performance, maximum achievement ability, etc. Mastery criterion is not generally specified or projected outcomes defined.

Criterion-referenced evaluation refers to a process designed to compare a child only to himself in relation to whether or not levels of expectancy (standards) were achieved. The predetermination of objectives and mastery of the objectives usually form the criteria for evaluation.

Example:

(Stated objective with criteria.) Given a doll, the student will identify by writing the name of each part that can bend with at least five correct.

Test:

Here is a doll. Name each part that can bend.

In ascertaining an evaluation criteria for the mastery of objectives, teachers might consider:

- preassessment strategies needed
- concurrent needs for assessing progress
- modification needs for instruction
- influential entrance competencies (factors that affect learning)
- style of teacher
- instruction for specific (individual) students
- cyclical changes for nonachievement of objectives
- summative and formative evaluation data
- management of instructional strategies for goal achievement
- consideration of learning style with evaluative criteria.

REEVALUATION STRATEGIES

1. Use many techniques for evaluating the goals and objectives:
 - rating scales
 - profiles
 - checklists
 - observations (formal, informal)
 - tests
 - interviews
 - presentations.
2. Record a child's best responses to the evaluation measure.
3. Include some type of formative evaluation strategies in order that goals and objectives are evaluated regularly and changes can be made early.

4. Apply evaluation procedures which are directly related to what was specified in the goals and objectives. Allow for observability.
5. Try not to invalidate tests by the "practice effect" (using the test until the child becomes familiar with items).
6. Allow daily evaluations to occur simultaneously with instruction. This may aid in evaluating those behaviors directly related to objectives.
7. Use accuracy, duration and rate or frequency as measures to help define mastery.
8. Don't be afraid to use teacher observations and feelings in evaluating a child's progress.
9. Don't think changing goals is necessary if strategies and techniques for meeting goals were ineffective.
10. Continually review the overall plan for a child in assessing progress.
11. Use product or summative evaluation as a measure of assessing overall performance.
12. Look for needed adjustments in one of the following: goal or objective statement, strategies, timelines, materials, instruction, resources, implementors.
13. Insure success for moving the child from one "stage" to another by instituting changes early (if necessary).
14. Use some of these techniques for process evaluation: autobiographies, anecdotal records, conferences, checklists, interviews, graphs, drills, rating scales, discussions, games, work samples, exhibits, records, observations, logs, profiles, essays, charts, case studies, questionnaires, psychometric tests.

REEVALUATION PROCESSES

Formative Emphasis

Ongoing evaluation of goal achievement/effectiveness

Description of specific problem areas

Error locations

Feasibility checks

Teacher interactive style

Materials effectiveness

Evidence for programming changes

Technique matching

Conditions producing positive results

Recording/reporting changes

Identification of prerequisite skills

Special service evaluation

Strategy changes

Revisions (in IEP) needed

Methods

Precision teaching
Criterion-referenced tests
Charts/logs
Profile sheets
Teacher-made tests
Continuous review
Questionnaires
Anecdotal records
Cumulative records
Checklists
Interviews
Drill
Classroom interaction
Observation
Teacher reports
Interviews
Medical reports
Parent input
Developmental scales

Methods

Student records
Follow up questionnaires
Interviews
Teacher reports
Achievement tests
Cost benefit analysis
Cumulative records
Questionnaires
Psychological reports
Student follow up checklists
Services evaluation
Profiles, graphs
Conference plans
Method/material review
Standardized tests

DAILY/WEEKLY EVALUATION CHECKLIST

It may be beneficial for the classroom teacher to design a checklist for evaluating the ongoing instructional program. The checklist can help the teacher to stay "on target" and may, in addition, aid the teacher in making adjustments in the following areas:

- teaching style
- pinpointing needs
- emotional adaptations
- learning styles
- establishing rapport
- discipline techniques
- grouping patterns
- work assignments
- goal/objective focus
- scheduling
- recording
- conference planning
- material preparation
- general interactive skills
- reporting
- audio-visual equipment needs
- peer interaction techniques
- general programming.

A teacher's checklist can bring closure to the efforts of assessing general classroom dynamics. Your very own evaluation check may be prepared to incorporate your needs. Make any adaptations/changes in the following guide.

Summative Emphasis

Learning gains
Extent of goal achievement
Student satisfaction
Teacher satisfaction
Parent satisfaction
Effect of material use
Costs factors
Tests characteristics
Extent of test use
Evidence for programmatic changes
Matching of techniques
Alteration of procedures
Relevant information for future planning
Placement evaluation
Comparison of management techniques
Evaluation of recording system
Appropriateness of instruction
Other gains
IEP revisions needed
Schedule changes

Date(s) _____

Teacher Behavior

Yes/No

1. Gave at least five smiles. _____
2. Did not yell (inside classroom). _____
3. Acted/reacted with respect to every child. _____
4. Positively reinforced responses. _____
5. Showed (visible) acceptance for the atypical child. _____
6. Observed peer interaction. _____
7. Observed the manner in which students responded positively to voice quality. _____
8. Presented alternatives to students when confronted with indecision. _____
9. Promoted a climate of warmth while saying "no." _____
10. Laughed at your mistakes. _____
11. Exhibited an empathetic and supportive attitude. _____

Instruction

1. Wrote clear objectives for lesson(s). _____
2. Clearly defined task(s) of objective. _____
3. Provided appropriate activities for tasks. _____
4. Began lesson(s) with a motivating technique. _____
5. Provided a multi-sensory approach for achieving task. _____
6. Had materials and lesson prepared before beginning instruction. _____
7. Task(s) followed logically/sequentially from previous lesson. _____
8. Assured task was understood by student(s). _____
9. Group tasks provided a maximum of participation. _____
10. Adequate reinforcement/practice was provided. _____

Instruction

Yes/No

11. A myriad of experiences were planned for skill maintenance or the next sequential skill. _____
12. Provided a feedback mechanism for instruction. _____

Discipline

1. Did not publicly discipline a student(s). _____
2. Remained clam when student(s) over-reacted. _____
3. Established a reward system for appropriate behavior. _____
4. Responded to emotional needs of student. _____
5. Allowed other students to aid in the discipline. _____
6. Allowed child to explain actions. _____
7. Showed trust and understanding. _____
8. Explained teacher actions to avoid confusion. _____
9. Sent a "nice note" home. _____
10. Set high expectations for the class. _____
11. Touched, hugged, gave personal attention (if appropriate). _____

Staff/Faculty/Parents

1. Shared a new idea, technique, book, story, paper. _____
2. Exchanged students or allowed an exchange of ideas. _____
3. Gathered input on a tough decision. _____
4. Gave someone a pleasant smile. _____
5. Took an "extra" step to contact a parent. _____
6. Did not reject a child sent from a peer's classroom. _____
7. Asked a peer how a technique, idea or strategy could be used. _____

INDIVIDUAL EDUCATION PROGRAM

TOTAL SERVICE PLAN

Student's Name _____ School _____ Grade _____

Summary of Present Levels of Performance:
(Strengths & Weaknesses)

Committee Members Present:

LEA Representative _____
Teacher(s) _____

Parent _____
Student _____

Date of Meeting: _____
Date of Review: _____

COMMITTEE RECOMMENDATIONS

Placement:

- ☐ Regular class w/consultative support
- ☐ Regular class w/itinerant support
- ☐ Resource room
- ☐ Self-contained w/integration
- ☐ Self-contained
- ☐ Special school
- ☐ Other

% OF TIME IN REGULAR
CLASSROOM

DATE OF PROGRAM
ENTRY

Justification: _____

Specific Procedures/Techniques, Materials, etc.
(Include information about learning style.)

Long Term Goal: _____

Priority: # _____

Short-Term Objectives (in measurable terms)	Special Educational and/or Support Services	Person(s) Responsible	Begin- ning Date	Projected Ending Date	Review Date	Objective Criteria/ Evaluation Procedures

KENNETT COUNTY SCHOOLS

INDIVIDUAL EDUCATION PROGRAM

Student's Name _____ Date of Birth _____
 Grade _____ School _____
 Home Address _____
 Home Phone _____ Parent's Name _____
 Current Placement _____ Date of Current Placement _____
 Date(s) of Committee Meeting(s) _____
 I.E.P. to begin (Date) _____ Tentative I.E.P. Review Date _____

COMMITTEE MEMBERS:

<i>Name and Position</i>	<i>Name and Position</i>
_____	_____
_____	_____
_____	_____
_____	_____

EDUCATIONAL SERVICES TO BE PROVIDED:

Services Required	Beginning & Entry Dates*	Frequency of Services	Individual Responsible for the Service	Review Dates
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

*If educational service is not available at this time, state N-AV.

Extent of time student is scheduled in the regular educational program:	<i>Justification of student's I.E.P.:</i>
---	---

PROGRAM SHEET: I.E.P. _____ STUDENT'S NAME: _____
 SUBJECT/CONTENT AREA: _____ PRIORITY: _____
 LONG-TERM GOAL: _____

Please complete one sheet for each long-term goal, and attach.

Present Level of Educational Functioning	Short-Term Objectives (in measurable terms)	Person(s) Responsible and Position	Beginning and Projected Ending Date	Objective Criteria and Evaluation

SHANNON COUNTY SCHOOLS

INDIVIDUAL EDUCATION PROGRAM

Student's Name	Birthdate	School
Parent's Name	Address	
Home Phone	Current Placement	Date of Current Placement
Date(s) of Committee Meeting(s)		
I.E.P. to Begin (Date)	Tentative I.E.P. Review Date	

EDUCATIONAL SERVICES TO BE PROVIDED:

Services Required	Beginning & Ending Dates	Frequency of Services	Individual Responsible for the Service	Review Date
Example: Resource Room	10/3/77-6/5/78	4 hrs. per wk.	Jane Doe	1/11/78

Percent of time student is scheduled in the regulation educational instructional program: _____

Justification of Student's I.E.P.:

PRINCIPAL	PARENT
REGULAR CLASSROOM TEACHER	REGULAR CLASSROOM TEACHER
SPECIAL NEEDS TEACHER	

SHANNON COUNTY SCHOOLS

PROGRAM SHEET: I.E.P.

Name of Student

Subject/Content Area

Long-term goal:

Please complete one sheet for each long-term goal, and attach.

Present Level of Educational Functioning	Short-Term Objectives (in measurable terms)	Objective Criteria and Evaluation	Beginning and Projected Ending Date	Person(s) Responsible and Position

APPENDIX A

TESTS, CHECKLISTS, INVENTORIES

The following tests, checklists, inventories or suggested word lists are provided as handy assessment devices which can be used to give the teacher another tool by which children's needs may be ascertained.

Included are:

1. *Readiness Inventory*—a checklist which will help determine the current level of skill development.
2. *Personal Inventory* — a sentence completion device which will help pinpoint specific interests and personal feelings.
3. *Inventory of Reading Interests*—a questionnaire which can be used to gather information on reading interests and habits.
4. *Inventory of Mental and Physical Health*
5. *Inventory of Interests and Activities* — an inventory to help pinpoint interests.
6. *Ways of Checking Child's Comprehension*.
7. *Teacher's Diagnostic Check Sheet* — a reading device which aids in pinpointing reading strengths and weaknesses.
8. *Diagnostic Spelling Test* — a spelling aid which will help to diagnose spelling problems.
9. *Phonics Mastery Test* — a phonics test which can be used to identify strengths and weaknesses in the use of vowels and consonants.
10. *Checksheet for Independent and Instructional* reading levels.
11. *Diagnostic/Testing/IEP Materials*.

Child's Name: _____

Date: _____

Skill Development

Yes No

Personal Data

1. Knows name
 - first _____
 - second _____
2. Knows mother's name _____
3. Knows father's name _____
4. Can tell his/her age _____
5. Knows his/her sex _____

Fine Motor

1. Can touch hands/fingers together at midline _____
2. Can string large beads _____
3. Can copy forms (i.e., t, X) _____
4. Can cut along straight line _____
5. Uses scissors correctly _____
6. Can build a tower
 - 6 blocks _____
 - 8 blocks _____
 - 10 blocks _____
7. Scribbles with pencil _____
8. Can color within lines _____
9. Uses pencil correctly _____
10. Can print letters _____
11. Can print name _____
12. Can do rhythmic writing _____

Gross Motor

1. Walking
 - can walk forward on line _____
 - can walk backward on line _____
 - can walk sideways on line _____
2. Can hop on one foot (4-5 hops) _____
3. Can jump _____
4. Can skip smoothly _____
5. Can balance himself/herself one foot
 - 2 seconds _____
 - 4 seconds _____
6. Can throw a ball _____
7. Can catch a ball _____
8. Can do jumping jacks _____
9. Can imitate movements _____

Body Image

1. Can identify body parts
 - 4 parts _____
 - 6 parts _____
 - 8 parts _____
 - more _____

Skill Development

Yes No

2. Can draw a person
 - 4 parts _____
 - 6 parts _____
 - 8 parts _____
 - more _____
3. Can point to body parts while naming _____

Spatial Relationships

1. Knows and understands (check)

_____ up	_____ out	_____ top	_____ big
_____ down	_____ in	_____ bottom	_____ little
_____ right	_____ above	_____ few	_____ long
_____ left	_____ over	_____ many	_____ short
_____ beside	_____ under	_____ near	_____ next to
_____ in front of	_____ behind	_____ out	_____ far

Visual Input/Output

1. Recognizes colors

_____ red	_____ green	_____ black	_____ white
_____ orange	_____ blue	_____ purple	
_____ yellow	_____ indigo	_____ pink	
2. Recognizes shapes

_____ circle	_____ triangle	_____ cross
_____ square	_____ rectangle	
3. Can match
 - symbols _____
 - pictures _____
 - letters _____
 - words forms _____
 - words _____
 - numerals _____
 - numerals to sets _____
4. Can recognize numerals

_____ 1	_____ 6
_____ 2	_____ 7
_____ 3	_____ 8
_____ 4	_____ 9
_____ 5	_____ 10

 - more _____
 - can count
 - 1-3 _____
 - 1-5 _____
 - 1-10 _____

Auditory Input/Output

1. Can repeat sequences
 - 0-1 _____
 - 1-3-7 _____
 - 4-5-6-2 _____
 - can repeat sentences _____
2. Can respond to
 - one-step directions _____
 - two-step directions _____
 - three-step directions _____
 - more _____

Skill Development**Yes****No**

3. Knows rhyming words _____
4. Knows consonant sounds _____
 — initial _____
 — medial _____
 — final _____
5. Can hear vowel sounds in a word _____
 — short _____
 — long _____
6. Can hear number of syllables in a word _____
7. Can detect rise and fall of voice _____

Language

1. Word utterances _____
 — one word _____
 — two words _____
 — three words _____
 — four words _____
 — complete simple sentence _____
 — complex sentence _____
2. Has adequate expressive language _____
3. Has adequate receptive language _____
4. Speaks clearly _____
5. Has good listening skills _____

Skill Development**Yes****No**

6. Comprehends _____
 — questions _____
 — plurals _____
 — adjectives _____
 — prepositions _____
 — opposites _____
- Can define simple words _____
 — complex words _____

Social

1. Is able to _____
 — work alone _____
 — in groups _____
 — relate to adults _____
 — relate to peers _____
 — follow directions _____
 — complete a task _____
 — works neatly _____
2. Emotional level is usually _____
- | | | |
|--------------|-------------|---------------------------|
| — aggressive | — happy | — eager to please |
| — angry | — explosive | — sad |
| — disruptive | — withdrawn | — positive |
| — frustrated | — negative | — adequate attention span |

PERSONAL INVENTORY

1. Today I feel
2. When I have to read I
3. I get angry when
4. To be grown up
5. My idea of a good time
6. I wish my parents knew
7. School is
8. I can't understand why
9. I feel bad when
10. I wish teachers
11. I wish my mother
12. Going to college
13. To me, books
14. People think I
15. I like to read about
16. On weekends, I
17. I don't know how
18. To me, homework
19. I'll never
20. I wish people wouldn't
21. When I finish high school
22. I'm afraid
23. Comic books
24. When I take my report card home
25. I'm at best when
26. Most brothers and sisters
27. I'd rather read than
28. When I read math
29. The future looks
30. I feel proud when
31. I wish my father
32. I like to read when
33. I would like to be
34. For me studying
35. I often worry about
36. I wish I could
37. Reading science
38. I look forward to
39. I wish someone would help me
40. I'd read more if

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Source: *Improvement of Reading*, Strange-McCullough-Tragler, McGraw-Hill Publishing Co.

INVENTORY OF READING INTERESTS

1. What do you do when you are not in school?
2. What games do you like to play?
3. Do you enjoy reading books and magazines?
4. What kinds of books do you like to read?

biography	aviation
adventure	poetry
animal stories	plays
news	myths
legends	fantasy
horror stories	other
5. Name some of the books you have read this past year. Which did you like best?
6. Do you get the books you read from home, school, library, or from friends?
7. What magazines do you read? Why?
8. Do you like to read newspapers? Why?
9. Do you like to have someone read to you? Who reads to you?
10. Does anyone encourage you to read during your leisure time?
11. What kinds of books and stories do you own?
12. What comics or comic book do you read?
13. Do you have a library card? When do you use it?
14. When is your favorite reading time?
15. Do you have a favorite story or book? What?
16. Do you like or dislike reading?
17. What would you like to read or learn about?
18. Do you have trouble in reading? What gives you trouble?
19. If you could have three wishes, what would they be?

INVENTORY OF MENTAL AND PHYSICAL HEALTH

1. Who lives at your house?
2. What happens at home to make you happy?
3. What happens to make you unhappy?
4. What happens at school to make you happy?
5. What happens at school to make you unhappy?
6. Are you afraid of anything?
7. When do you go to bed?
8. Do you have a room of your own?
9. What did you have for breakfast this morning?
10. What did you have for dinner last night?
11. Do you go home for lunch or stay at school?

INVENTORY OF INTERESTS AND ACTIVITIES

1. What are some of the things you like to do?
2. What do you usually do right after school?
3. What do you usually do in the evenings, on Saturdays, on Sundays?
4. Do you take any special lessons?
5. Do you belong to a club?
6. How often do you go to the movies?
7. Where did you go during the summer?
8. Have you ever been to a farm, circus, zoo, museum, picnic, ballgame, carnival, party, camp?
9. Have you ever taken a trip by boat, train, airplane, bus, car?
10. Do you ever listen to the radio? When?
11. Which television programs do you see?
12. What would you like to be when you are grown?
13. What would your parents like you to be?
14. Do you have a pet? If you could have a pet, what would you choose?
15. Do you have a hobby? What?
16. Who are the friends you like to play with at home and at school?

WAYS OF CHECKING CHILD'S COMPREHENSION

1. Matching pictures and sentences.
2. Writing answers to definite questions.
3. Finishing incomplete sentences.
4. Drawing illustrations of characters, actions, or scenes.
5. Collecting main points to be written on the blackboard and discussed.
6. Finding key words.
7. Dramatizing or dramatic play.
8. Discussing and reporting by pupils.
9. Proving or disproving a statement.
10. Classifying words which describe a given object, person or time.
11. Selecting the part of the story liked best.
12. Discussing an important character in the story.
13. Making outlines.
14. Selecting the sentence which tells the story best.
15. Selecting the best title for the story or paragraph.
16. Telling in what way two characters were alike and in what way different.
17. Discriminating between crucial and incidental facts.
 - a. the most important part of the story is _____.
 - b. Some incidents I like are _____.

TEACHER'S DIAGNOSTIC CHECK SHEET

Name of child C.A. M.A. R.A. Grade

Teacher

I. Reading Attitude

Yes No

1. Does the child withdraw from reading?
2. Does he seem to have an emotional disturbance?
3. Does he appear attentive?
4. Does he enjoy reading?
5. Does he project self into reading?

II. Behavior Status

1. Does he show self-control?
2. Is he overly sensitive?
3. Are his social adjustments satisfactory?
4. Are there any fears or tensions?
5. Does he seek recognition and reaction from others?
6. Is he timid or shy?
7. Is he cooperative?
8. Is he aggressive?

III. Learning Status

1. Does he grasp ideas readily?
2. Does he have a good memory span?
3. Does he have the ability for visualization?
4. Can he follow directions?
5. Is he imaginative and does he show initiative?

IV. Perception

1. Does he have good vision? Glasses?
2. Does he have satisfactory auditory acuity?

V. Comprehension

1. Does he understand what he reads?
2. Does he remember what he reads?
3. Does he have the ability to make judgments?
4. Is he able to draw conclusions?
5. Does he organize what he reads?
6. Does he associate what he reads with his own experience?

VI. Word Analysis

1. Does he use context clues?
2. Does he make use of picture clues?
3. Does he use structural analysis?
4. Does he use configuration clues?
5. Does he apply phonetic principles?
6. Does he sense syllables?
7. Does he guess at words?

VII. Physical Aspects of Reading

Yes No

1. How many fixations does he make per line? _____
2. Does he have an accurate return sweep movement?
3. Does he point as he reads?
5. Are there any other bodily movements?
6. Does he move his lips?
7. Are there any indications of inner vocalization?
8. Is the posture good?
9. Is the book held about 16 inches from the eyes?
10. Does he hold the book at the right angle?

VIII. Mechanical Aspects of Reading

1. Is he a word-by-word reader?
2. Does he make substitutions?
3. Does he make omissions?
4. Does he mispronounce words?
5. Does he have reversals?
6. Does he repeat words?
7. Does he make regressions?

IX. Concentration

1. Is he able to concentrate?
2. Is he easily disturbed by other room activities?
3. Does he show expressions of pleasure on his face while reading?
4. Does he lack interest?
5. Does he have poor study habits?
6. Does he have a plan for working?
7. Does he lack perseverance?

X. Reading Rate

1. Does he read falteringly when he reads aloud?
2. Does he read at an average rate in silent reading?

Teacher's Summarization

1. Test given and date
 - Achievement, Intelligence, Visual and Auditory
 - Hand and Eye Dominance
 - Interpretation of Test scores
2. Diagnosis
3. Amelioration
4. Prognosis

DIAGNOSTIC SPELLING TEST

Grade Scoring List 1:

Below 15 Correct	Below 2nd Grade
15-22 Correct	Second Grade
23-29 Correct	Third Grade

Give List 1 to any pupil whose placement is second or third grade.

Any pupil who scored above 29 should be given the List 2 test.

List 1

Word	Illustrative Sentence
1. not	He is <i>not</i> here.
2. but	Mary is here, <i>but</i> Joe is not.
3. get	Get the wagon, John.
4. sit	Sit down, please.
5. man	Father is a tall <i>man</i> .
6. boat	We sailed our <i>boat</i> on the lake.
7. train	Tom has a new toy <i>train</i> .
8. time	It is <i>time</i> to come home.
9. like	We <i>like</i> ice cream.
10. found	We <i>found</i> our lost ball.
11. down	Do not fall <i>down</i> .
12. soon	Our teacher will soon be here.
13. good	He is a good boy.
14. very	We are <i>very</i> glad to be here.
15. happy	Jane is a <i>happy</i> girl.
16. kept	We <i>kept</i> our shoes dry.
17. come	Come to our party.
18. what	What is your name?
19. those	<i>Those</i> are our toys.
20. show	Show us the way.
21. much	I feel <i>much</i> better.
22. sing	We will <i>sing</i> a new song.
23. will	Who <i>will</i> help us?
24. doll	Make a dress for the <i>doll</i> .
25. after	We play <i>after</i> school.
26. sister	My <i>sister</i> is older than I.
27. toy	I have a new toy <i>train</i> .
28. say	Say your name clearly.
29. little	Tom is <i>little</i> .
30. one	I have only <i>one</i> book.
31. would	<i>Would</i> you come with us.
32. pretty	She is a <i>pretty</i> girl.

Any pupil who scores below 9 should be given the List 1 test.

Grade Scoring List 2:

Below 9 Correct	Below 3rd Grade
9-19 Correct	Third Grade
20-25 Correct	Fourth Grade
26-29 Correct	Fifth Grade
Over 29 Correct	Sixth Grade and/or Better

List 2

Word	Illustrative Sentence
1. flower	A rose is a <i>flower</i> .
2. mouth	Open your <i>mouth</i> .
3. shoot	Joe went to <i>shoot</i> his new gun.
4. stood	We <i>stood</i> under the roof.
5. while	We sang <i>while</i> we marched.
6. third	We are in the <i>third</i> grade.
7. each	<i>Each</i> child has a pencil.
8. class	Our <i>class</i> is reading.
9. jump	We like to <i>jump</i> rope.
10. hit	<i>Hit</i> the ball hard.
11. bite	Our dog does not <i>bite</i> .
12. study	<i>Study</i> your lesson.
13. dark	The sky is <i>dark</i> and cloudy.
14. jumped	We <i>jumped</i> rope yesterday.
15. hitting	John is <i>hitting</i> the ball.
16. studies	He <i>studies</i> each day.
17. darker	This color is <i>darker</i> than that one.
18. jumping	The girls are <i>jumping</i> rope now.
19. darkest	This color is the <i>darkest</i> of the three.
20. jumps	Mary <i>jumps</i> rope.
21. biting	The dog is <i>biting</i> on the bone.
22. afternoon	We may play this <i>afternoon</i> .
23. grandmother	Our <i>grandmother</i> will visit us.
24. can't	We <i>can't</i> go with you.
25. doesn't	Mary <i>doesn't</i> like to play.
26. night	We played outdoors last <i>night</i> .
27. brought	Joe <i>brought</i> his lunch to school.
28. apple	An <i>apple</i> fell from the tree.
29. again	We must come back <i>again</i> .
30. laugh	Do not <i>laugh</i> at other children.
31. because	We cannot play <i>because</i> of the rain.
32. through	We ran <i>through</i> the yard.

Analysis of Spelling Errors

Some clues to the pupil's familiarity with these phonetic and structural generalizations can be observed by noting how he spells the common elements.

List 1

Word	Element Tested
1. not	
2. but	
3. get	short vowels
4. sit	
5. man	
6. boat	
7. train	two vowels together
8. time	
9. like	vowel-consonant-e
10. found	
11. down	ow-ou spelling of ou sound
12. soon	
13. good	long and short oo
14. happy	
15. very	final y as short i

16. kept	
17. come	c and k spelling of the k sound
18. what	
19. those	wh, th, sh, ch, and ng spellings
20. show	ow spelling of long o
21. much	
22. sing	
23. will	
24. doll	doubled final consonants
25. after	
26. sister	er spelling
27. toy	oy spelling of oi sound
28. say	ay spelling of long a
29. little	le ending
30. one	
31. would	non-phonetic spellings
32. pretty	

List 2

Word	Element Tested
1. flower	ow, ou, spelling of ou sound
2. mouth	er ending, th spelling
3. shoot	long and short oo, sh spelling
4. stood	
5. while	wn spelling, vowel-consonant-e
6. third	th spelling, vowel before r
7. each	ch spelling, two vowels together

8. class	double final consonant, hard c
9. jump	
20. jumps	addition of s, ed, ing, j spelling
14. jumped	of soft g sound
18. jumping	
10. hit	doubling final consonant before
15. hitting	ing
11. bite	
21. biting	dropping final e before ing
12. study	changing final y to i before plural
16. studies	ending
13. dark	
17. darker	er, est endings
19. darkest	
22. afternoon	
23. grandmother	compound words
24. can't	
25. doesn't	contractions
26. night	
27. brought	silent gh
28. apple	le ending
29. again	
30. laugh	
31. because	non-phonetic spellings
32. through	

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PHONICS MASTERY TEST

Teacher's Guide for Administration

Level A

I. Consonant Sounds*

Directions: Read the words below (or other words with underlined sounds). Ask students to record the first letter of each word next to the appropriate number on their answer sheets.

- | | |
|--------------------|--------------------|
| 1. <u>p</u> erson | 11. <u>t</u> int |
| 2. <u>b</u> elt | 12. <u>s</u> ound |
| 3. <u>m</u> allard | 13. <u>d</u> ough |
| 4. <u>h</u> unt | 14. <u>n</u> inety |
| 5. <u>k</u> ick | 15. <u>r</u> hythm |
| 6. <u>w</u> indow | 16. <u>l</u> ark |
| 7. <u>f</u> orty | 17. <u>j</u> ersey |
| 8. <u>v</u> ictory | 18. <u>y</u> olk |
| 9. <u>m</u> ink | |
| 10. <u>g</u> olden | |

II. Consonant Diagrams

Directions: Continue as above except to ask students to record the first two letters of each word read.

- | | |
|--------------------|-------------------|
| 19. <u>sh</u> oe | 22. <u>th</u> ese |
| 20. <u>ch</u> urch | 23. <u>wh</u> at |
| 21. <u>th</u> ing | |

III. Consonant Blends

Directions: Continue as above.

- | | |
|---------------------|-----------------------|
| 24. <u>bl</u> ind | 34. <u>gr</u> ope |
| 25. <u>cl</u> ock | 35. <u>pr</u> actices |
| 26. <u>fl</u> ower | 36. <u>tr</u> asure |
| 27. <u>gr</u> ew | 37. <u>sc</u> ale |
| 28. <u>pl</u> ump | 38. <u>sm</u> all |
| 29. <u>sh</u> eeper | 39. <u>sn</u> eak |
| 30. <u>br</u> eam | 40. <u>sp</u> ill |
| 31. <u>cr</u> eam | 41. <u>st</u> amp |
| 32. <u>dr</u> op | 42. <u>sw</u> eat |
| 33. <u>fr</u> ieud | |

IV. Blending Consonants and Rhyming Elements

Directions: Ask children to write at least two words which rhyme with the word given.

- | | |
|----------|----------|
| 43. ball | 45. get |
| 44. make | 46. will |

*All consonant sounds are represented except 2.

Level B

I. Long and Short Vowels

Directions: Read the words (or other words with the underlined sounds). Ask students to record vowel letter heard. The students must write *short* in front of the short vowels, and *long* in front of long vowels. (Correct answers are given in parentheses.)

- | | |
|---------------------------|----------------------------|
| 1. <u>i</u> bid (short i) | 6. <u>o</u> prod (short o) |
| 2. <u>a</u> jab (short a) | 7. <u>u</u> bun (short u) |
| 3. <u>e</u> ve (long e) | 8. <u>i</u> tle (long i) |
| 4. <u>o</u> lbe (long o) | 9. <u>e</u> zst (short e) |
| 5. <u>a</u> lave (long a) | 10. <u>u</u> be (long u) |

II. Other Vowel Sounds

Directions: Read the words, asking students to record the vowel or vowels which they hear. If a vowel depends on the consonant which follows it for its sound, the consonant should be written after the vowel. Some sounds can be spelled several ways. Any of these should be accepted. (Correct answers are given in parentheses.)

- | | |
|---------------------------------|--------------------------------------|
| 11. <u>oo</u> nook (oo) | 15. <u>oy</u> Troy (oy) |
| 12. <u>ou,ow</u> grouse (ou,ow) | 16. <u>er,ir,ur</u> whirl (er,ir,ur) |
| 13. <u>oo</u> broom (oo) | 17. <u>aw</u> claw (aw) |
| 14. <u>ar</u> jar (ar) | 18. <u>oi</u> coil (oi) |

III. Syllabication

A. Directions: Read the words, asking the students to write the number of syllables in each. (Correct answers are given in parentheses.)

- | | |
|----------------|------------------------|
| 1. Atlanta (3) | 4. sedentary (4) |
| 2. Lincoln (2) | 5. correspondingly (5) |
| 3. frame (1) | |

B. Directions: Read the same words, asking the students to write for each the number of the accented syllable.

- | | | | | |
|------|------|------|------|------|
| 1. 2 | 2. 1 | 3. 1 | 4. 1 | 5. 3 |
|------|------|------|------|------|

Word Recognition

Purpose:

1. To estimate the child's *independent* and instructional reading levels.
2. To identify word recognition errors made during oral reading and to estimate the extent to which the child actually comprehends what he reads.

As the child reads each selection orally, record his word recognition errors. The child makes a word recognition error when he repeats, substitutes, omits or needs teacher assistance in pronouncing words.

Discontinue at the level in which the child mispronounces or indicates he does not know 5 of the 20 words in a particular grade level (75%). Each correct response is worth five points.

After the child reaches the cut-off point (75%), his oral reading level should be started at the highest level in which he successfully pronounced all (100%) 20 words in the list.

Pre-Primer

1. for
2. blue
3. car
4. to
5. and
6. it
7. helps
8. stop
9. funny
10. can
11. big
12. said
13. green
14. look
15. play
16. see
17. there
18. little
19. is
20. work

Primer

1. was
2. day
3. three
4. farming
5. bus
6. now
7. read
8. children
9. went
10. then
11. black
12. barn
13. trees
14. brown
15. good
16. into
17. she
18. something
19. what
20. saw

Level 1

1. many
2. painted
3. feet
4. them
5. food
6. tell
7. her
8. please
9. nests
10. cannot
11. eight
12. trucks
13. garden

Level 2

1. stood
2. climb
3. isn't
4. beautiful
5. waiting
6. head
7. cowboy
8. high
9. people
10. mice
11. corn
12. everyone
13. strong

Level 1 (cont.)

14. drop
15. stopping
16. frog
17. street
18. fireman
19. birthday
20. let's

Level 2 (cont.)

14. I'm
15. room
16. blows
17. gray
18. that's
19. throw
20. roar

Level 3

1. hour
2. senseless
3. turkeys
4. anything
5. chief
6. foolish
7. enough
8. either
9. chased
10. robe
11. crowd
12. crawl
13. unhappy
14. clothes
15. hose
16. pencil
17. cub
18. discover
19. picture
20. nail

Level 4

1. spoon
2. dozen
3. trail
4. machine
5. bound
6. exercise
7. disturbed
8. force
9. weather
10. rooster
11. mountains
12. island
13. hook
14. guides
15. moan
16. settlers
17. pitching
18. prepared
19. west
20. knowledge

Level 5

1. whether
2. hymn
3. sharpness
4. amount
5. shrill
6. freedom
7. loudly
8. scientists
9. musical
10. considerable
11. examined
12. scarf
13. pacing
14. facing
15. oars
16. delicious
17. octave
18. terrific
19. salmon
20. briskly

Level 6

1. sentinel
2. nostrils
3. march
4. sensitive
5. calmly
6. tangle
7. wreath
8. teamwork
9. billows
10. knights
- instinct
12. liberty
13. pounce
14. rumored
15. strutted
16. dragon
17. hearth
18. shifted
19. customers
20. blond

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DIAGNOSTIC/TESTING/IEP MATERIALS

Achievement/Diagnostic

American School Achievement Tests: This battery of tests is designed to measure pupil achievement in reading, language arts, arithmetic, and social sciences; Grade: 4-6; 0:10-0:25; Individual; \$1.10; Bobbs-Merrill.

Basic School Skills Inventory (BSSI): Identifies problems in areas that will affect a child's later academic success: basic information, self-help, handwriting, oral communication, reading readiness, number readiness & classroom behavior. Normal referenced and criterion referenced; Ages: 4-7; 0:15-0:20; Individual; \$12.96; Follett.

Brigrance Diagnostic Inventory of Basic Skills: Evaluates more than 200 basic skills in reading readiness, language arts and mathematics for an immediate developmental age equivalent or grade level performance; Grade: K-6; Untimed; Individual; \$30.95; Curriculum Assoc.

Criterion Test of Basic Skills: Quick assessment that gives specific criterion referenced feedback on basic skill objectives and deficits in reading and math abilities. Test scores can easily be converted to form a profile of strengths and weaknesses; Grade: K-8; 0:10-0:15; Individual; \$17.00; Academic Therapy.

Detroit Tests of Learning Aptitude: These tests evaluate individuals who require an individual intelligence test to verify results on a group test, or because of emotional or physical problems. The tests provide specific information about mental traits, motor speed and precision, social adjustment and abilities or disabilities in learning; Ages: 3 yrs-Adult; 1:00-1:35; Individual; \$10.80; Bobbs/Merrill.

Metro 1978 Metropolitan Achievement Tests: These tests consist of six comparable levels, measuring respective skills in word knowledge, word discrimination, reading, arithmetic, language, spelling, and social studies and science; Grade: 1-12, 2:00-4:00; Group; Harcourt.

Peabody Individual Achievement Test (PIAT): This test evaluates reading recognition, reading comprehension, spelling, mathematics and general information; Two Volumes; Grade: K-Adult; 0:30-0:45; Individual; \$32.00; AGS.

Sequential Tests of Educational Progress Series II (STEP): This survey group of achievement tests measure broad outcomes in major educational areas: language arts, mathematics, science, and social studies. STEP series tests skill in solving new problems based on learning information; Grade: 3-Adult; 1:00-2:00; Group; Ed. Test. Ser. Addison.

Stanford Achievement Test: This test battery measures skills in word meaning, paragraph meaning, vocabulary, spelling, and word-study skills; includes 5 different levels; Age: 1-9; 0:35-1:35; Individual; \$3.10; Harcourt.

The TARC Assessment System: For intervention/programming four major domains with specific subscales within each. Measures self-help motor, communication, social skills, measurement reformative; Ages: 3-16; Several Weeks; Group; \$5.95; H & H Enter.

Intelligence

Slosson Intelligence Test: This instrument is a brief individual test of intelligence. It is designed to be used by untrained examiners as well as teachers who work with both children and adults. Scoring is fairly objective and can be done during the testing time. Standards for correct responses are given and are available during testing; Ages: 2wks-Adult; 0:10-0:30; Individual; \$12.50; Slosson Educational Publications.

Language

A Psychoeducational Inventory of Basic Learning Abilities: This instrument identifies suspected learning disabilities. It has not been standardized and relies entirely on the examiners subjective evaluation. The inventory samples educational tasks from 53 basic learning abilities grouped in six major areas of learning; gross-motor development, sensory motor integration, perceptual-motor skills, language development, conceptual skills and socialization; Ages: 2-14; 1:00-2:00; Individual; \$9.75; Fearon.

Brigrance Diagnostic Inventory of Early Development: A system for teachers to integrate assessment/diagnosis, record keeping, objective setting, and comprehensive instructional planning. Assessment of the following skills: psychomotor, self-help, communication, general knowledge and comprehension, reading, printing, and math; Criterion-referenced; Ages: 0-7; Varying times; \$1.00; Curriculum Assoc.

Circus, Level A, B, C, and D: Assessment program to evaluate early childhood curricula and to diagnose instructional needs of individual children. Tests general knowledge, vocabulary, number skills, perception, attitudes and interests; Grade: PreS.-3; Untimed; Ind or Gp; \$7.50 ea; Addison.

Essential Math and Language Skills: The program enables teachers to assess individual student readiness for learning basic mathematical and language concepts; to teach essential skills and track each student's process; Ages: 5-12; Untimed; Individual; \$75.00; Hubbard.

Illinois Test of Psycholinguistic Ability (ITPA): Test measures auditory decoding, visual decoding, auditory-vocal association, vocal encoding, automatic-sequential ability, auditory-vocal automatic ability, visual motor association, auditory-vocal sequencing ability and visual motor sequencing ability; it also evaluates visual, auditory, and grammatic closure. Test requires prior training; Grade: 2-10; 0:45-1:00; Individual; \$58.00; Univ. Of Ill. Press.

Kindergarten Auditory Screening Tests (KAST): Screens for problems in auditory perception in 3 areas: discrimination of same or different word pairs, phonemic syntheses, figure-ground discrimination; Grade: Late K-early 1; 0:20; Ind.-sm. group; \$12.99; Follett.

Language-Structured Auditory Retention Span Test (LARS): This test indicates the level of auditory short term memory and detects the presence of a learning disability in recall ability. It makes use of an unfamiliar word in an

otherwise familiar sentence; Ages: 2yr-Adult; 0:20; Individual; \$7.00; Academic Therapy.

Metro 1978 Metropolitan Achievement Tests: (see above).

Peabody Picture Vocabulary Test (PPVT): Vocabulary test utilizes a graduated series of 150 plates, each containing four pictures. It requires no reading by examinees; Grade: 2yr-Adult; 0:05-0:10; Individual; \$14.00; AGS.

Screening Test for Auditory Comprehension of Language: This screening test is an efficient method of identifying those children in need of more in-depth testing. Composed of 25 items, it is designed for small group administration by the classroom teacher; Ages: 3-6; 0:05-0:10; Group; \$4.75; Learning Concepts.

Sequenced Inventory of Communication Development: A diagnostic test to evaluate communication abilities of normal and retarded children. Kit includes over 200 toys for administering; Ages: 4mo-4yr; Untimed; Individual; \$125.00; Univ. of Wash. Press.

Sequential Tests of Educational Progress (STEP) Series II (see above).

Slingerland Screening Tests for Identifying Children with Specific Learning Disability: These tests identify probable perceptual motor difficulty: visual, auditory or kinesthetic; Grade: 1-5; 1:00; Individual or Group; \$30.50 (for all); Ed. Pub. Ser.

Specific Language Disability Test: Test evaluates perception in visual discrimination, visual memory, visual to motor coordination, perception in auditory discrimination, auditory-to-visual coordination, and comprehension. All written sections evaluate handwriting and ability to follow directions; Grade: 6-8; 0:10-0:15; Individual; \$8.75; Ed. Pub. Ser.

Test for Auditory Comprehension of Language English/Spanish: Measure a child's receptive language in English or Spanish. Test covers vocabulary, morphology and syntax; Ages: 3-6; 0:10-0:20; Individual; \$39.95; Learning Concepts.

Math: Achievement & Diagnostic

Analysis of Reading Skills: Reading and Mathematics: Three short tests designed to provide a means of determining the most appropriate time for a child to enter reading and mathematics programs. Directions given to both English and Spanish; Grade: PreS-1; 0:30-0:40; Individual or Group; \$1.80; Houghton Mifflin.

Basic Arithmetic Skill Evaluation (BASE): Allows evaluator to quickly assess each student's arithmetic skills and deficiencies and to plan a program of remediation using tests and materials from the classroom; Grade: 1-8; Varying times; Individual; Complete 1-8 (\$239.); Imperial Int. Learning Corp.

Brigance Diagnostic Inventory of Early Development (see above)

Circus, Level A, B, C, and D (see above).

Criterion Test of Basic Skills (see above).

Essential Math and Language Skills (see above).

Everyday Skills Tests (EDST): Measures the skills in reading and mathematics necessary for effective participation in today's society; Criterion referenced; Grade: 6-12; 0:30-0:40 per test; Group; \$5.00; CTB/McGraw.

Fountain Valley Teacher Support System in Mathematics: Provides self-administered tests on audio tapes which diagnose student deficiencies. Nine strands are covered: numbers and operations, geometry, measurement, application of mathematics, statistics; Grade: K-8; Tapes; Individual; Custom Pkg; Zweig Assoc.

Illinois Test of Psycholinguistic Ability (ITPA): (see above).

Keymath Diagnostic Arithmetic Test (KEYMATH): Provides a diagnostic assessment of skill in mathematics. Contains 14 subjects in three major areas: *Content* (numeration, fractions, geometry, & symbols); *Operations* (addition, subtraction, multiplication, division, mental computation & numerical reasoning); and *Applications* (word problems, missing elements, money measurement & time); and *Metric* (linarity, mass, capacity, area, temperature); Ages: PreS-6; 0:30; Individual; \$23.85; AGS.

Metro 1978 Metropolitan Achievement Tests (see above).

Sequential Tests of Educational Progress (STEP) Series II (see above).

Stanford Diagnostic Mathematics Test: This test is designed on two different grade levels to diagnose specific weaknesses in working with numbers. Specifically the focus is on an understanding of properties of the number system and on computation. It does not deal with problem solving; Grade: 2-8; Untimed; Group; \$2.90; Harcourt.

Miscellaneous

Assessing the Learning Disabled: SELECTED INSTRUMENTS: The text briefly describes more than 300 assessment tools applicable for the evaluation of children and adults with specific learning disabilities in terms of age applicability, time to administer, and salient characteristics; \$5.00; Academic Therapy.

Behavior Problem Checklist: An instrument which the authors believe can provide wider, more systematic and more objective information about deviant behavior than can unaided clinical observation; Grade: K-4; Untimed; Individual or Group; Children's Research Center, Univ. of Ill.

Classroom Screening Instruments: An instrument to enable any classroom teacher to identify and make a reasonable differentiation of a child's specific learning disabilities; Grade: PreS-12; Untimed; Group; \$15.95/\$16.95; Learning Pathways.

Developmental Task Analysis: Consists of 100 behavioral tasks that are basic to success in learning. Rating scale from 0 to 3; Grade: 2-4; Untimed; Individual; \$2.55, Fearon.

Mathematics Tests Available in U.S.: \$1.50; \$1.50; NCTM.

Mathematics Tests and Reviews: \$25.00; Gryphon.

The Nexus: Test Results to Insight for Remediation:
\$6.00; Academic Therapy.

Motor

A Psychoeducational Inventory of Basic Learning Abilities: This instrument identifies suspected learning disabilities. It has not been standardized and relies entirely on the examiners subjective evaluation. The inventory samples educational tasks from 53 basic learning abilities grouped in six major areas of learning: gross-motor development, sensory motor integration, perceptual-motor skills, language development, conceptual skills and socialization; Ages: 2-14; 1:00-2:00; Individual; \$9.75; Fearon.

Movement Skills Survey: Developed to assist in evaluating selected aspects of a child's motor development. Sensory-motor and movement skills include coordination and rhythm, agility, flexibility, strength, speed, balance, endurance, and body awareness. To be used with Frostey-Maslaw-Move-Grow-Learn Program; Grade: K-2; Untimed; Individual; \$4.89; Follett.

Perceptual-Motor Behaviors Checklist: Informal checklist for developing motor skills; Ages: 3-7; Untimed or timed; Individual; U. of Cal.

Southern California Sensory Integration Test: These tests detect and determine the nature of sensory integration dysfunction. They consist of a battery of 17 tests. The tests measure visual, tactile, and kinesthetic perception in addition to several types of motor performance; Ages: 4-10; 1:00-1:15; Individual; \$98.50; Western Psychological. (Requires training)

Southern California Postrotary Nystagmus: A standardized procedure to evaluate the normalcy of the duration of nystagmus following rotation as an indicator of disorders in the vestibular system; Ages: 5-9; 5:00; Individual; \$39.50; Western Psychological. (Requires training)

Perception/Sensory

A Perceptual Testing and Learning Guide for Kindergarten Teachers: A guide for testing and evaluating visual motor skills. Also procedures for teaching methods that can be used to help children develop necessary learning skills; Grade: K; Untimed; Individual or Group; Winter Haven Lions Research Found.

A Psychoeducational Inventory of Basic Learning Abilities: (see above).

Ann Arbor Learning Inventory: Covers visual discrimination, visual motor coordination skills, sequential memory skills, auditory skills, comprehension skills; Grade: 2-4; Untimed; Individual; \$4.50; Ann Arbor Publish.

Auditory Memory Span Test: Assesses ability to retain and recall familiar, isolated words received aurally; Ages: 5-8; 0:05-0:10; Individual; \$11.00; Western Psych. Ser.

Auditory Sequential Memory Test: Assesses ability to repeat from immediate memory an increasing series of digits. Determines child's readiness for learning to read and speak with accuracy. Related to spelling and math; Ages: 5-8; 0:05; Individual; \$11.00; Western Psych. Ser.

Circus, Level A, B, C and D (see above).

Detroit Tests of Learning Aptitude (see above).

Developmental Test of Visual Motor Integration: Test detects problems in visual-motor integration by using geometric form reproductions in an increasing order of difficulty; Grade: 2-8; 0:10; Group; \$12.35; Follett.

Illinois Test of Psycholinguistic Ability (ITPA) (see above).

Jordon Left-Right Reversal Test: This test diagnoses neurological reading problems by measuring the relative frequency of letter and number reversals. It determines at what point these reversals become significant as a minimal neurological impairment symptom; Ages: 5-12 yrs; 0:20; Individual; \$3.50; Academic Therapy.

Language-Structured Auditory Retention Span Test (LARS) (see above).

Lindamood Auditory Conceptualization: This test is designed to measure auditory perception; Grade: PreS-adult; Untimed; Individual; \$13.95; Teaching Resources.

Motor Free Visual Perception Test: This quick and reliable test measures a child's visual-perceptual abilities without involving any motor component; Age: 4-8 yrs; 0:10; Individual; \$17.00; Academic Therapy.

Oliphant Auditory Discrimination Memory Test: This test measures auditory discrimination ability; Grade: 1-adult; 0:05-0:15; Individual or Group; \$1.50; Educators Pub. Service.

Oliphant Auditory Synthesizing Test: This test assesses the ability to listen to a word spoken in separate phonemes, and to memorize and blend these phonemes in correct sequence in order to assign them a linguistic meaning; Grade: 1-adult; 0:05-0:15; Individual; \$1.50; Educators Pub. Service.

Pupil Record of Educational Behavior (PREB): This diagnostic inventory evaluates a child's level and pattern of functioning. Covers gross motor coordination, fine motor skills, visual motor integration, auditory and visual perception, association and generalization, language development, mathematical concepts; Grade: PreS-upper primary; Untimed; Individual; \$59.95; Teaching Resources.

Quick Neurological Screening Test (QNST): This test detects neurological deficits. It measures sensory loss as well as large and small muscle coordination, emotional and intellectual problems. The QNST evaluates readiness for number concepts and also identifies auditory and visual perceptual deficits; Grade: K-adult; 0:20; Individual; \$12.00; Academic Therapy.

Slingerland Screening Tests for Identifying Children with Specific Language Disability (see above).

Student Disability Survey: Device to screen school children who need assistance beyond resources in regular classroom. Five areas covered are: poor academics, poor intellectuality, poor attention, poor classroom involvement, excessive aggressiveness; Grade: Ungraded; 0:03-0:05; Individual; \$6.95; Arden Press.

Test of Nonverbal Auditory Discrimination (TENVAD): Identifies primary grade children who have auditory dis-

crimination problems that may affect later academic success. Five subjects: pitch, loudness, rhythm, duration, timbre; Grade: K(end)-3; 0:15-0:20; Individual; \$2.10; Follett.

Wepman Auditory Discrimination Test: A test for determining auditory discrimination ability. Easy to administer and score. Use for predicting articulatory speech defects and remedial reading problems. Has phonetic and phonemic balance; Ages: 5-8; 0:05; Individual; \$11.00; Language Research Associates.

Wepman Visual Discrimination Test: Easy to administer and interpret measure of ability to discriminate between similar visual perceived forms. A test to measure skills needed prior to learning to read; Ages: 5-8; Untimed; Individual; \$19.50; Language Research Associates.

Preschool Readiness

A Perceptual Testing and Learning Guide for Kindergarten Teachers (see above).

Activity Level Rating Scale: To assist in the psychological assessment of cerebral palsied children; Ages: 2 mos-5 yrs; Untimed; Individual; K. Banham Duke Univ.

AAMD Adaptive Behavior Scale-Public School Version: A diagnostic-prescriptive tool used in assessment. Consists of 95 behaviors important in maintaining personal independence in daily living; Grade: 2-6; Untimed; Individual; \$10.00; Amer. Assoc. on Mental Deficiency.

AHR's Individual Development Survey: To identify possible learning or behavior problems for the purpose of remediation or treatment; \$2.00; Priority Innovations.

American School Reading Readiness Test, Revised: Designed as a survey test to determine a child's readiness to learn to read; Ages: 5-6; 0:30; Group; \$6.31; Bobbs-Merrill.

An Inventory of Primary Skills: Consists of 300 developmental learning tasks categorized in 19 areas for parents and teachers to use in making observations of those tasks felt to be important in a child's learning. Also, may be used as a basis for prescriptive instruction; Grade: PreS-2; Untimed; Individual; \$4.80; Fearon.

Analysis of Reading Skills: Reading and Mathematics (see above).

Assessing Children for Early Prescriptive Teaching (ACEPT): Measures experience and skill development in three major areas; Ages: 4-7; Untimed; Individual; Economy.

Basic School Skills Inventory (BSSI) (see above).

Boehm Test of Basic Concepts: A picture test covering 50 basic concepts essential to understanding oral communications; Grade: K-2; 0:30; Individual or Group; \$15.45; Psychological Corp.

Briganice, Diagnostic Inventory of Early Development (see above).

The Brekken Drouin Development Spotcheck: To quickly assess a child's development in everyday situa-

tions; Ages: Birth-5; Untimed; Individual; Casa Colina Hospital, Pomona, CA 91767.

California Preschool Social Competency Scales: A 30 item teacher's rating scale to obtain objective, numerical evaluations of social competency; Ages: 2.6-5.6; Untimed; Individual; \$1.50; Consulting Psychologist.

Carolina Developmental Profile: An aid to determine the educational needs of a child; Ages: 2-5; Untimed; Individual; \$.75; Kaplan Press.

Child Development Assessment Form: Designed to help the teacher and parent observe the child in different areas of development and to follow the child's progress; Ages: 3-6; Untimed; Individual or Group; \$.25; Humanics Associates.

Child's Ability Profile, Form A: To indicate a child's placement in motor skills, selected discrimination, and social areas. Possible use may be as a quick instrument used during pre-kindergarten registration; Ages: 4-5; Untimed; Individual; \$4.00; Instructional Fair.

Circus, Level A, B, C and D (see above).

Daberon: To determine a child's readiness for academic learning; Ages: 4-6; 20:0; Individual; Daberon Research Portland, Oreg.

Delco-Elfman Developmental Achievement Test: To help determine a child's present level of functioning. It can aid in the preparation of an individual education plan (IEP); Ages: 6 mos-6 yrs; Untimed; Individual; Del. Co. Intermediate Unit, Media, PA.

Del Rio Language Screening Test (English/Spanish): The purpose of this test is to identify children with deviant language skills for age, language and background; Ages: 3 yrs-6 yrs 11 mos; Untimed; Individual; \$12.60; National Ed. Lab. Pub., Inc.

Detroit Tests of Learning Aptitude (see above).

Developmental Indicators for the Assessment of Learning (DIAL): This screening test detects potential learning problems. Deals with the multidimensional concepts of gross motor, fine motor, communications and concepts. The test presents one stimulus at a time; Ages: 2-5; Untimed; Individual; \$99.50; Dial, Inc.

Developmental Reading: A diagnose and prescribe reading design keyed to specific behavioral objectives, not tied to any particular basal system; Grade: PreK-adult; \$1.50-\$16.00 (depending on level); Paul Amidon & Associates, Inc.

Developmental Test of Visual Motor Integrations (see above).

Early Childhood Survey: A Diagnostic Assessment of Learning Skills: The ECS materials evaluate visual perception skills, auditory perception skills, language cognition and motor skills; Grade: K-2; Untimed; Individual; \$55.00; ECS, Inc.

Fargo Preschool Screening Test: To identify four year olds with potential learning problems; Age: 4 yrs; 15:00; Individual; Fargo Public Schools Fargo, N. Dakota.

Initial Learning Assessment: To ascertain the gross acquisition of a child's abilities in order that an individual education program can be provided; Age: Not stated; Untimed; Individual; \$4.75; Academic Therapy.

Kindergarten Assessment Profile and Skills Survey (KAPS): Provides an individual diagnosis and developmental profile of a child's strengths and weaknesses; Grade: K; Untimed; Individual or Group; A.I. DuPont District, Wilmington, DE.

Kindergarten Auditory Screening Tests (KAST) (see above).

Kindergarten Evaluation of Learning Potential (KELP): This instrument evaluates learning potential. Assesses three levels of learning-association, conceptualization and creative-self expression; Grade: K; 0:30-0:45; Individual; \$149.12; McGraw-Hill.

Kohn Problem Checklist & Kohn Social Competence Scale: Designed to assess the social-emotional functioning of young children in preschool settings; Age: 3-6; Untimed; Individual; \$5.00; Martin Kohn, Ph.D.

Language-Structured Auditory Retention Span Test (LARS) (see above).

Lindamood Auditory Conceptualization Test (see above).

Metropolitan Readiness Test: These group administered tests measure ability in word meaning, listening, letter recognition, picture matching, numbers and copying. A supplementary section includes a draw-a-man test that measures perceptual maturity and motor control; Grade: K-1; 1:00; Group; \$12.15; Harcourt.

Minnesota Preschool Scale: Scale uses verbal comprehension and memory tests to arrive at a verbal score. Also includes a nonverbal scale that measures form recognition, tracing, picture completion, block building, and simple puzzle skills; Ages: 1-6; 0:10-0:30; Individual; \$43.00; AGS.

Motor Free Visual Perception Test (see above).

Northwest Syntax Screening Test: To provide rough screening for the syntactical (grammatical) structure of language, both expressive and receptive. Best used in conjunction with other speech and language tests (articulative, vocabulary comprehension, etc.); Age: 3 yr-7 yr 11 mo; Untimed; Individual; Northwest Univ.

Ochlocknee Five Year Old Screening Test: This test is designed to quickly assess a child for school and academic readiness; Age: 5 yrs; Untimed; Individual; \$.40; Southwest GA Program for Except. Child.

Parent Readiness Evaluation of Preschoolers: Designed to determine the child's strengths and weaknesses in prerequisite skills for formal learning; Age: 3 yr 9 mo-5 yr 8 mo; 0:30-0:45; Individual; \$2.40; Priority Innov.

Peabody Picture Vocabulary Test (PPVT) (see above).

Portage Guide to Early Education: Developed to serve as a guide to teachers, aides, nurses, parents or others who need to assess a child's behavior and plan realistic curriculum goals that lead to additional skills; Age: Birth-6 yr; Untimed; Individual; \$32.00; Portage Project.

Preschool Attainment Record: This preschool scale of development employs the informant-interview method. It provides an assessment of physical, social and intellectual functioning; Age: 6 mo-7 yr; 0:20-0:30; Individual; \$5.00; AGS.

Pre-Reading Screening Procedures to Identify First Grade Academic Needs -- Slingerland: Test designed to evaluate auditory, visual and kinesthetic modality strengths in order to identify children who may have some form of dyslexia or specific language disability; Grade: K(end)-1 (begin); Group; \$14.00; Educators Pub. Service.

Program for Pre-School Visually Impaired Children Developmental Checklist: To assess the visually impaired child's functioning within the normal world; Age: Birth-5 yr; Untimed; Individual; Connect.

The Pupil Rating Scale: Screening for Learning Disabilities: This instrument identifies learning disabilities by rating these behavioral areas: auditory comprehension, spoken language, orientation, motor coordination and personal-social behavior. It yields eight different scores; Age: 7-10 yr; 0:05-0:10; Individual; Grune & Stratton.

Pupil Record of Educational Behavior (PREB): This diagnostic inventory evaluates a child's level and pattern of functioning. Covers gross motor coordination, fine motor skills, visual motor integration, auditory and visual perception, association and generalization, language developments, mathematical concepts; Grade: PreS-upper primary; Untimed; Individual; \$59.95; Teaching Resources.

Quick Neurological Screening Test (QNST) (see above).

Screening Test for Auditory Comprehension of Language: This screening test is an efficient method of identifying those children in need of more in-depth testing. Composed of 25 items, it is designed for small group administration by the classroom teacher; Ages: 3-6; 0:05-0:10; Group; \$4.75; Learning Concepts.

Screening Test for the Assignment of Remedial Treatments: To provide dependable information concerning children's performance in important skill areas essential for learning; Age: 4 yr 6 mo-6 yr 5 mo; 1:00; Group \$3.50; Priority Innovations.

Screening Test of Academic Readiness (STAR): This test is to screen children for early entrance into a program to identify learning problems or social and emotional difficulties for early referral; Ages: 4 yr 5 mo-6 yr; 1:00; Group; \$3.50; Priority Innovations.

Sequenced Inventory of Communication Development: A diagnostic test to evaluate communication abilities of normal and retarded children. Kit includes over 200 toys for administering; Age: 4 mo-4 yr; Untimed; Individual; \$125.00; U. of Wash. Press.

Simkov Perceptual Organization Inventory: This inventory identifies children with visual-motor perception problems; Grade: PreS-1; 0:20; Group; \$7.25; Antof Ed. Supply.

Slosson Intelligence Test (see above).

The Tarc Assessment System (see above).

Templin-Darley Tests of Articulation: Designed to measure a child's articulatory proficiency through a quick screening or diagnostic test; Age: 3-8 yr; Untimed; Individual; \$5.75; Univ. of Iowa.

Test for Auditory Comprehension of Language: The purpose of this test is to measure the auditory comprehension of language structure and, on the basis of the child's performance, permit assignment of the child to a developmental level of comprehension; Age: 3-6 yr; 0:20; Individual; \$39.95; Learning Concepts.

Valett Developmental Survey of Basic Learning Abilities: The survey is an aid for teachers and others in evaluation of the developmental abilities of a child; Age: 2-7; Untimed; Individual; \$1.25; Consulting Psych. Press.

Vineland Social Maturity Scale: The central purpose of this scale is to represent some particular aspect of the ability to look after one's own needs. Measures such aspects of social ability as self-direction and social participation; Grade: 1-adult; Untimed; Individual; \$4.80; AGS.

Woodcock Johnson Psycho-Educational Battery: This test provides an overview of learning aptitudes, scholastic achievement, cognitive ability and interest level for student evaluation; Age: PreS-adult; 0:20-?; Individual; \$69.00; AGS.

Yellow Brick Road: Designed to provide insight into strengths and weaknesses of a child in each area of functioning; enable the early identification of children for referral and therapy; Age: 5-6 yr; 1:00; Individual; \$29.95; Learning Concepts.

Reading: Reading Related

Analysis of Readiness Skills: Reading and Mathematics (see above).

Criterion Test of Basic Skills (see above).

Developmental Reading (see above).

Durrell Listening Reading Series: This instrument consists of a reading test and a parallel listening test that measures understanding of the spoken word; Grade: 1-9; 1:10-1:20; Individual; Harcourt.

Everyday Skills Test (EDST) (see above).

Fountain Valley Teacher Support System in Reading: Self-administered tests on audio-tapes. Measure student's mastery in five skill areas: phonetic analysis, structural analysis, vocabulary development, comprehension and study skills. Cross-referenced to all major basal programs; Grade: 1-6; Tapes 8 to 16 min; Individual; Custom Pkg; Zweig Assoc.

Gray Oral Reading Test: Tests consists of 13 graded passages in each of four forms. Measures growth in oral reading, diagnoses reading difficulties and assists with pupil placement in grades and grading groups; Grade: 1-adult; Untimed; Individual; \$15.00; Ed. Progress Corp.

Individualized Criterion Referenced Testing: Reading: Tests learners reading skills against specific objectives. Provides means for planning individualized reading instruction. Direct correlations to existing basal readers computer scored. Criterion-referenced. Grade: 1-8; Untimed; Individual; \$15.00; Ed. Progress Corp.

Metro 1978 Metropolitan Achievement Tests (see above).

Objectives-Referenced Bank of Items and Tests Reading and Communication Skills Objectives (ORBIT): A list of 335 reading skill objectives from which customized, criterion referenced tests can be produced. Educators choose the instructional objectives they determine important. Criterion referenced; Grades: K-12; Group; \$4.00; CTB/McGraw.

Phonics Proficiency Scales: These scales measure proficiency and should not be used for teaching phonics. The scales are not tests, they merely assess growth and progress in performing the skills basic to reading and spelling; Grade: 1-6; 0:20-0:40; Individual; \$11.00 (both); Ed. Pub. Ser.

Prescriptive Reading Inventory: A criterion referenced testing system that measures student mastery of reading objectives commonly taught K-6. It is useful for diagnosing student's needs in reading and prescribing instructional interventions; Grade: K-6; Untimed; Group; \$10.00; CTB/McGraw.

Reading Diagnosis Kit: Gives a description of each diagnostic technique, directions for using the techniques and diagnostic tests that can be copied; Grade: 1-12; Individual or Group; \$14.95; Center for App. Res. in Ed.

Sequential Tests of Educational Progress (STEP) Series II (see above).

Stanford Diagnostic Reading Test: This test identifies specific strengths and weaknesses in reading comprehension, vocabulary syllabication, beginning and ending sounds, auditory skills, various aspects of phonetic analysis and rate of reading; should be administered in three sessions; Age: 2-8; 1:50-2:00; Individual; \$2.90 ea.; Harcourt.

Wisconsin Design for Reading Development: Tests consist of four individually administered tests at varying levels of difficulty. First level tests include rhyming words, shapes, letters and numbers, words and phrases and many other language related subjects. The highest level test includes subjects in sight vocabulary, silent letters, syllabication, accent, schwa, and possessiveness; Grade: K-4; 0:30-0:40; Individual; \$6.00; NCS Ed. System.

Woodcock Johnson Psycho-Educational Battery: (see above).

Woodcock Reading Mastery Test (Woodcock): This test battery includes five individual tests which yield separate scores as well as a total score. It is comprised of letter identification, word attack, word comprehension and passage comprehension. Tests are criterion referenced. Provides socio-economic adjusted norms as well as traditional

total group norms; Grade: K-adult; 0:20-0:30; Individual; \$20.50 (Form A), \$22.00 (Form B); AGS.

Social Adjustment/Personality Scale:

A Psychoeducational Inventory of Basic Learning Abilities (see above).

AAMD Adaptive Behavior Scale: Behavior scale for EMH/EH persons. Scale consists of 100 individual explicit items describing skills and habits for daily living; Ages: All; Untimed; Individual; \$6.00; Amer. Assoc. for Mental Deficiency.

AAMD Adaptive Behavior Scale-Public School Version (see above).

Assessing Children for Early Prescriptive Teaching (ACEPT) (see above).

Burks Behavior Rating Scale: Measures patterns of behavior. Including excessive self blame, poor ego strength, poor reality contact, poor social conformity plus 14 more; Grade: PreS-K & 1-8; Untimed; Individual; \$7.95 (ea.); Arden Press.

Caine-Levine Social Competency Scales: A 44 item behavioral rating scale to estimate social competence of the children in the following areas: self-help, initiative, social skills and communication; Age: 5-13; Untimed; Individual; \$1.75; Consulting Psy. Press.

Devereux Child Behavior Rating Scale: This behavior rating scale was developed to enable those persons in close contact with a child to describe and communicate to others the behaviors that the child is displaying, this scale assesses such areas as basic self-care, attentive power, need for independent mastery, and four areas related to social functioning; Age: 8-12; Untimed; Individual; \$4.50; Devereux Press.

Devereux Elementary School Behavior Rating Scale: A behavioral measuring device to aid teacher in focusing upon behavioral difficulties affecting academic performance so that remedial action may be taken; Grade: Elementary; Untimed; Individual; \$4.50; Devereux Press.

Measurement of Social Competence: A manual for the Vineland Social Maturity Scale; Grade: 1-adult; \$9.50; AGS.

The Pupil Rating Scale: Screening for Learning Disabilities (see above).

Student Disability Survey (see above).

Vineland Social Maturity Scale: The central purpose of this scale is to represent some particular aspect of the ability to look after ones own needs. Measures such aspects of social ability as self-sufficiency, occupational activities, communication, self-direction and social participation; Grade: 1-adult; Untimed; Individual; \$4.80; AGS.

Walker Problem Behavior Identification Checklist: Fifty statement checklist to quickly identify behavior problems. Provides scores for five scales: acting out, withdrawal, distractibility, disturbed peer relations and immaturity; Grade: 4-6; Untimed; Individual; \$10.50; Western Psych.

Individualized Education Program

AAMD Adaptive Behavior Scale-Public School Version (see above).

Activities for Developing Visual Perception: A manual that presents practical and easy-to-do exercises that train and develop the visual-perceptual abilities of children; Grade: K-6; \$2.00; Academic Therapy.

Carolina Developmental Profile (see above).

Child Development Assessment Form (see above).

Daberon (see above).

Delco-Elfman Developmental Achievement Test (see above).

Developmental Test of Visual Motor Integration (see above).

Diagnostic Inventories: Math: Grade: 1-5; 0:05-0:10; Individual; U. of Oregon.

Diagnostic Inventories: Reading: Grade: 1-5; 0:05-0:10; Individual; U. of Oregon.

Ebsco Kit 1: This kit was developed for teachers of Severe and Profound and TMR student, as a resource in developing and teaching the IEP; \$110.00; Ebsco Curr. Materials.

Ebsco Kit 2: This kit was developed for teachers who have students with behavioral and attitudinal deficiencies. Resources are provided for the development of the IEP; \$110.00; Ebsco Curr. Materials.

Ebsco Kit 3: This kit was specifically developed for the older MR student. Provides the teacher with information to help develop an IEP effectively; \$110.00; Ebsco Curr. Materials.

Fargo Preschool Screening Test: To identify four year olds with potential learning problems; Age 4 yrs; 15:00; Individual; Fargo Public Schools, Fargo, N. Dakota.

Handbook in Diagnostic Teaching: Diagnostic handbook focusing on skills in reading, writing, spelling, arithmetic and language. A "How-To" manual. Used with duplicator master books; \$19.95; Allyn & Bacon.

Teacher's Handbook of Diagnostic Inventories: Spirit master's covering spelling, reading, handwriting and arithmetic; \$19.95; Allyn & Bacon.

Teacher's Handbook of Diagnostic Screening: Spirit master's covering auditory, motor, visual and language; \$19.95; Allyn & Bacon

Individualized Education Program (IEP): Planning, Placement, Implementation, and Evaluation forms and folder for individual program development; Grade: Ungraded; \$14.95 kit; Mesa Publications.

Initial Learning Assessment: The purpose of this screening instrument is to ascertain the gross acquisitions of a child's abilities in order that an IEP can be provided; Grade: Ungraded; Untimed; Individual; \$4.75; Academic Therapy.

Instructional Based Appraisal System (IBAS): IBAS is a comprehensive planning and appraisal system for writing individual education plans, instructional planning and evaluating. There is continuous assessment of perfor-

mance integrated into the program; Grade: Upgraded; Untimed; Individual; \$99.00; Edmark.

An Introduction to Individualized Education Program Plans in Pennsylvania: Guidelines for School Age IEP Development: This guide is an introduction to the process of developing individualized education programs for handicapped, gifted and talented children; Pa. Dept. of Ed.

Minnesota Developmental Programming System: The MDPS is designed to provide persons serving the developmentally disabled individual with assessment and programming assistance; Outreach Training Prog., U. of Minn., St. Paul.

Portage Guide to Early Education (see above).

Power Reading System: Combined diagnostic/prescriptive approach to reading skills enables the teacher to individualize reading instruction. Organized to cover word recognition, comprehension and study skills; Grade: 1-3; Individual or Group; \$130.00; BFA.

A Practical Guide to Writing Goals and Objectives: \$2.50; Academic Therapy.

A Primer on IEPs for Handicapped Children: \$4.95; Foundation for Exceptional Children.

Preschool Attainment Record (see above).

Remedial Training for Children with Specific Disability in Reading, Spelling, Penmanship: Gillingham method used by reading specialists and remedial teachers in special

classes and for individual tutoring. Technique is simple approach to phonics; Grade: 1-6; \$17.50; Ed. Pub. Serv.

Phonics Drill Cards: Goes with "Remedial Training for Children with Specific Disability in Reading, Spelling, Penmanship"; \$15.00; Ed. Pub. Serv.

Santa Clara Inventory of Developmental Tasks: Inventory enables the teacher to assess student's readiness skills and create an individual development for each child. Tasks are arranged by difficulty into eight areas: motor coordination, visual motor performances, visual perception, visual memory, auditory perception, auditory memory, language development and conceptual development; Age: PreS-7 yrs; Untimed; Individual; \$94.50; Zweig.

Sequential Testing and Educational Programming (STEP): Resource guide to curriculum covering all phases of sensory input, organization and output, through the highly sophisticated activities of reading, writing, spelling and artistic expression; Grade: PreS-6; Untimed; \$22.50; Academic Therapy.

The Tarc Assessment System (see above).

Valett Developmental Survey of Basic Learning Abilities (see above).

Writing Individualized Program: A Workbook for LD Specialists: \$7.50; CC Publications.

APPENDIX B

LEARNING

Following is a list of the many terms previously discussed and utilized within the main text. It may be useful to the reader to review these terms periodically and to add new words and definitions as they become relevant through everyday experience. A common professional language is essential to clear communication, which in turn facilitates implementation of a successful educational program. This list is provided in hopes that it may serve as a resource for the building of a common language and basis of understanding.

TERMS RELATED TO LEARNING

1. *Acuity* — a level of sensory function that refers to keenness of sight, hearing or touch.
2. *Agnosia* — the inability to comprehend or interpret information that is received through one of the senses.
3. *Analytic Concepts* — a type of cognitive style whereby objects are categorized according to their similar components or properties
4. *Assimilation* — perceiving and interpreting new information in terms of existing knowledge and understanding.
5. *Attention* — the ability to concentrate or focus on visual or auditory stimuli for a period of time.
6. *Auditory Channel* — pertaining to information that is received through the sense of hearing.
7. *Aversive Conditioning* — a form of learning brought about through the use of punishment or a negative reinforcer.
8. *Behavioral Predisposition* — a concept which connotes that one has a tendency toward certain behavioral characteristics given certain environmental conditions.
9. *Behaviorism* — a doctrine emphasizing that organismic activity is a product of conditioning and learning experiences. Emphasis is placed on observable evidence.
10. *Behavior Modification* — a conditioning technique designed to shape and/or change behavior.
11. *Centering* — the ability to concentrate on outstanding characteristics of an object while excluding other features.
12. *Classical Conditioning* — a learning theory wherein the subject responds to a previously neutral stimulus after it has been effectively paired with a stimulus which originally produced the response.
13. *Cognition* — intellectual activity of an individual. The mental processes involving awareness, judgment, thought and perception.
14. *Cognitive Dissonance* — inconsistency or conflict in thought, actions, beliefs, etc., resulting in a motivation towards tension reduction.
15. *Cognitive Style* — the manner in which one organizes information, solves problems, and learns generally.
16. *Collective Monologue* — egocentric communication characterized by the inability of children to listen effectively to what others are saying.
17. *Concept* — an abstract idea or mental image formed to represent an object or idea.
18. *Conformity* — a change in behavior which is in accordance with some specified standard.
19. *Convergent Thinking* — a mental process involved with gathering information relevant to a problem and then producing a single response to the problem.
20. *Creativity* — a mental process which allows an individual to operate on a body of knowledge and produce a novel end product or a new form. Imaginative skill is involved.
21. *Critical Period* — a point (usually early stages) at which strong bonds of attachment are made.
22. *Deduction* — a process of logic whereby one derives specific conclusions from general premises through reasoning.
23. *Defense Mechanism* — a behavioral response designed to enable one to escape anxiety.
24. *Differentiate* — to mark, see or show the difference or distinct characteristics of something.
25. *Differentiation* — the ability to sort out and use (independently) different parts of the body in a specific and controlled manner.
26. *Directionality* — the ability to determine the relationship between one object in space and another object. It includes projection of right and left, up and down, fore and aft, and directions from the body out into space.

27. *Distractibility* — a characteristic often associated with learning disabilities that refers to the tendency to be distracted by extraneous stimuli.
28. *Divergent Thinking* — a mental operation characterized by the quantity and quality of different and novel responses to a problem or idea.
29. *Egocentrism* — a style of thinking (in children) that causes difficulty in seeing other's point of view; a self-centeredness.
30. *Encoding* — that part of the communication process involving the translation of an idea into written, motoric or verbal language.
31. *Figure ground*:
Auditory — ability to recognize meaningful differences and be able to pick out specific tones and frequencies from a complex background of sounds.
Visual — ability to recognize meaningful differences in objects with varying foreground and backgrounds.
Kinesthetic — ability to isolate one body movement voluntarily from the movement of the entire body.
32. *Form Perception* — the ability to conceive form in all its parts, put it together as a whole unit and break it again into individual parts.
33. *Generalization* — the tendency, act or process of responding to a related group of stimuli in a similar manner, draw conclusions or show the applicability. At a cognitive level, the ability to find the same generalized properties of otherwise different stimuli.
34. *Gifted* — that quality of an individual who makes an extremely high score on an intelligence test.
35. *Handedness* — the choice of the hand or side that leads in all activities.
36. *Ideational Fluency* — refers to the flow and number of items that an individual can generate.
37. *Identification* — the process in which individuals perceive themselves as being alike or similar to other people and behave accordingly.
38. *Inhibition* — the forgetting or blocking out of a learned response.
39. *Integration* — the pulling together and organization of all the stimuli which contact the organism at a given moment. It involves the tying together of present experiences.
40. *Intelligence* — a term that encompasses an individual's proficiency in a variety of mental areas including problem solving, vocabulary, number ability, comprehension, etc.
41. *Introjection* — the process of assimilating the attributes of others or incorporating external values and attitudes into one's own ego structure.
42. *Learning* — a relatively permanent change in behavior as a result of experience.
43. *Learning Disabilities* — those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations; such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.
44. *Long-term Memory* — a storage system that enables individuals to retain information for relatively long periods of time.
45. *Modality* — the sensory system — auditory, visual, kinesthetic and tactile — through which one receives information. That system through which one learns better than through another.
46. *Negative Transfer* — the interference of a previously learned task with the learning of a new task.
47. *Object Permanency* — the mental ability that enables one to realize that objects exist even if they are out of the field of vision.
48. *Parallel Play* — the play exhibited by children between two and four and characterized by egocentrism which is expressed in the inability of children to separate themselves from their own thoughts; playmate interaction is restricted.
49. *Perception* — a unified awareness derived from sensory processes when a stimulus is presented. It is a sensation or experience which is combined or integrated with previous experiences. Perception is controlled by stimuli that is received and interpreted, memory, etc.
50. *Perceptual Constancies* — the tendency of an object to remain the same under different viewing conditions.
51. *Play* — spontaneous behavioral patterns that emerge when one engages in an unstructured activity solely for the pleasure that it offers.
52. *Positive Transfer* — the condition in which the learning of one task aids in the learning of another.
53. *Prehension* — the ability to grasp objects between the fingers and opposing thumb.
54. *Projective Test* — a personality test in which subjects are asked to respond to a standardized set of stimuli and explain what they see. Certain drawing tests are considered projective.
55. *Regression* — a defense mechanism characterized by the individual's reverting to behavioral responses characteristic of earlier developmental levels.
56. *Reinforcement* — the process of strengthening a response.
57. *Repression* — the defense mechanism characterized by the tendency to push from levels of awareness those experiences, thoughts or impulses associated with anxiety.
58. *Reversal Learning* — the tendency to learn the opposite of what was previously learned.
59. *Role* — a pattern of behavior one is expected to follow in a given social situation or condition.
60. *Rote Learning* — the process of learning by memorization without regard to meaning.

61. **Schemata** — organized patterns of thought such as sensory stimuli, objects and events.
62. **Self-concept** — the manner in which individuals perceive themselves.
63. **Self-esteem** — an individual's feeling of personal worthiness.
64. **Short-term Memory** — the temporary retention of information (usually 30-60 seconds). It is affected by interference and interruption.
65. **Socialization** — the process of learning how to adapt in a socially approved manner in specific environments.
66. **Spatial Orientation** — the ability to organize space in terms of distance, size, position, and direction and to determine one's physical relationship to his or her environment in reference to these dimensions.
67. **Symbolic Functioning** — an act of reference in which a mental image is created to stand for something that is not present.
68. **Transductive Reasoning** — reasoning from particular to particular without generalization.
69. **Trial-and-error Learning** — an individual's attempt to find an answer to a problem that has no clear-cut solution.
70. **Verbal Learning** — a learning situation that involves the use of words as either stimuli or as responses.
71. **Visual Channel** — all of the processes involved in the visual (seeing) aspects of learning, including sensation, perception, imagery and language.

LEARNING STYLES

The following section reviews key points and considerations when considering a child's specific learning style. Some methods of learning are more effective, efficient and appropriate for a given learner than are others. A child has preferences for one or more sensory channels in aiding skill acquisition. Input from sensory stimuli, processing, integration and interpretation of sensory data affects the way a child learns. Information (stimuli) is received through one or more sensory channels. These are:

1. **Visual** — learning through the eyes (seeing).
2. **Auditory** — learning through the ears (hearing).
3. **Haptic/tactile** — learning by touching and manipulating (feeling).

Information is processed according to the impact of presentation modes on sensory systems; hence, a child's best way of learning. Louisa Cook, an educational specialist at the School Problems Clinic, New England Medical Center has postulated this definition of learning style:

"Learning style is the way or ways a youngster learns best, generally and specifically. It refers to his preferences regarding format of presentation, rate of presentation, and avenue of presentation; it refers to the physical environment he prefers, the social conditions he prefers, and the incentives he needs to put forth his best effort."

Learning can also be expressed through various "output" modalities. The use of the auditory modalities is expressed in oral responses; some children write or draw as an expression of the visual modality (visual-motor); still, others model their responses, thereby preferring the haptic modality.

Some considerations of learning style should include:

1. The kind of activities suitable for a given modality or preference (input, output).
2. The *intellectual capacity* and *ability* of the child.
3. Areas of particular *competence* and *deficits* (i.e., academic, motoric).
4. The *time* of greatest productivity (i.e., morning, noon, evening).
5. *Deficit area information* for remediation purposes.
6. *Attention span characteristics* and schedules.
7. The *reinforcement criteria* necessary for performance.
8. *Physical environment* needed for optimum growth.
9. *Environmental stimulation* needed (level, type).
10. *Motivating forces* and *expectancies* needed for optimum performance.
11. *Preferred instructional activities* and assignments.
12. *Teacher attitudinal stances* needed for growth.
13. The use of a variety of techniques within a preferred modality.
14. The *format* of the instructional presentation.
15. *Evaluation modality* needed to clearly demonstrate mastery of a skill.

Intellectually Directed Styles (Social Approaches)

Learner Characteristics*

Works alone
Works quietly
Visits library
Avoids roleplay
Handles long-term assignments
Completes assignments
Avoids group participation
Avoids extracurricular activities
Persists at a task

Instructional Provisions

Learning carrels
Frequent library use
Individual assignments
Learning stations
Learning contracts
Learning activity packets
Individual projects
Independent reading activities
Home assignments
Promote group activities not involving leadership

Emotionally Directed Styles

Learner Characteristics*

Chooses art activities
Cares for plants and animals
Enjoys aesthetic projects
Enjoys informal activities
and performances
Cooperates in projects
Is not contest oriented
Is environmentally stimulated

Instructional Provisions

Plays, creative dramatics
Music groups
Story telling
Individual/group
Activities for arrangements
Art objects
Riddles

Structured Styles

Learner Characteristics*

Needs scheduling
Needs consistency in programming
Needs clear directions and instructions
Engages in convergent thinking
Must be given specific assignments
Goal-setting must be realistic
Works well with homogeneous groups
Is satisfied with status quo

Instructional Provisions

Time schedules
Tes. requiring single responses or specified answers
Experiments with specific outcomes
Reinforcement, continuous checks
Specific examples of assignments
Systematic scheduling of assignments
Simple experiments

Open Structured Styles

Learner Characteristics*

Has many interests
Moves from one activity to another
(without completion)
Assignments not done on time
Long-term assignments usually
not done unless deadline given
Procrastinates
Likes written assignments
Difficulty in carrying out tasks

*Learner Characteristics Adapted from *Data Bank Guide Learning Styles, Mainstreaming Mildly Handicapped Students into the Regular Classroom*, Education Service Center, Region XIII, Austin, Texas, 1975.

Needs more structure
Good verbal skills

Instructional Provisions

Puzzles
Riddles
Brain Teasers
Brainstorming sessions
Discussions/planning sessions
Written assignments
Short-term reports
Social interaction assignments
Interviews, debates

Slowly Paced Styles

Learner Characteristics*

Works slower than average
Task incomplete in prescribed time
Needs directions repeated and
given in small steps
Is frustrated by timed tests
and/or assignments
Works with deliberation
May daydream

Instructional Provisions

Simple directions with realistic assignments
Short-step assignments
No long-term assignments
Use typewriter for some written assignments
Use informal tests and inventories

Rapidly Paced Styles

Learner Characteristics*

Works Rapidly
Dislikes proofreading, checking work
Enjoys physical activity
Must have enough work to do,
Short, intense attention span
Prefers short-term assignments
Is bored with non-challenging,
slow instructional methods

Instructional Provisions

Give speed tests in mathematics, spelling
Use learning stations, packages
Use audio-visual aids with specific
followup assignments
Make keys for self-checking assignments
Give series of short-term assignments

Social Styles

Learner Characteristics*

Works well in groups
Leads many activities
Doesn't settle to quiet study very easily
Has trouble starting tasks

Enjoys "fun" assignments
Learns by watching
Participates in group activities

Instructional Provisions

Teach through use of games
Structure assignments
Get student "started" on a task
Use learning stations, packets
Use audio-visual aids
Riddles, puzzles
Physical activities

PRESENTATION MODES

The mode of presentation should complement a child's learning style. Various modes of presentation follow, along with a list of suggestions as to the appropriate medium through which material can be presented. In addition, specific activities are included, which the reader can expand or modify according to the preferred teaching style and accessibility of materials. (Cognitive Approaches)

Visual Channel

Medium	Use
Maps: riddles, questions, mazes, puzzles	tracing points, completions, comparisons, drawings
Magazines: captions, emotion riddles, picture stories, movies (roller)	reports, comparisons, pastings, picture words
Posters: book jackets, labels, advertisements	art activities, math assignments
Letters: postcards, rebus messages	personal messages
Greeting Cards: personal messages	
Flash Cards: phonics, picture clues	look-say, context clues
Pamphlets: child-made, reading assignments	advertisements, recipes
Newspapers: "find-the-word," cofiguration clues	make-your-own, sight words
Comics: sequencing, comprehension, comparisons	captions, picture stories, contrasts
Transparencies: sequencing, spelling, experiments	advertising, shows (animal), drawings
Filmstrips/slides: make-your-own (scholastic kits), presentations	

Medium	Use
Cooking/sewing: any curricular area	
Pictures/pictograph: rebus stories, spelling, reading	drawing assignments
Scientific Experiments: assignments, presentations	
Filmstrips/films/slides: "make-your-own," oral assignments, learning stations	captions, messages, reports
Bulletin Boards: stations, puzzles	announcements, manipulations
Role Playing: storytelling, language, reports	riddles, animal behavior, plays
Television: home assignments, reading along script	reports, comparisons/contrasts
Pictures: sequence, oral stories, riddles	captions, emotions
Toys: All curricular areas	
Shape Cards: mathematics, body parts, comparisons	completions, fill-in, tracing
Dominoes: all curricular areas	
Cameras: all curricular areas	
Straws/cups (paper): drinking, counters, art activities	holder, candle holder, telephone
Paint: all curricular areas	
Fruit: art activities, size shape, weight activities	mathematics
Dolls with Clothing: body parts, zipping/tying, stringing, buttoning	clothing parts, dressing
Clay: all curricular areas	
Typewriter: all curricular areas	
Puppets: many curricular areas	
Globe: games — "can you find?" social studies	
Cut-outs (flannel or other): all curricular areas	

Tactile/Kinesthetic

Medium	Use
Beads/marbles/blocks: all curricular areas	
Object-touch: mystery bag, temperature/ texture, weight/ length/distance	descriptions, comparisons
Pantomimes: role playing, riddles, spelling movements (alphabets), comparisons/contrasts	plays, animals
Exercises: follow directions, letter games — rhythmic movements	copying
Dioramas: reading assignments: main idea, sequence, main characters, colors, configuration	
Cutting (scissors): collages, pastings, clothing	configuration, letters, pictures
Drawings/posters/ pictures: all curricular areas	
Graphs/timelines: mathematics, other comparisons/contrasts	maps
Painting/maps: relief, reading assignments	language arts
Models: electrical objects, curricular areas, comparisons/ contrasts	building, animals
Writing: letters/ shapes, word problems, spatial concepts	reading, arithmetic, spelling

Auditory Channel

Medium	Use
Radio/television:	comparisons/contrasts, reading assignments
Tape recorders/ audio-tapes:	reading assignments: recordings, listening, main ideas, sequencing, tell-the-story, spelling
Records: all assignments	
Discussions/debates: group	teacher
Choral reading/ concerts: reading, presentations, comparisons/contrasts	language

Medium**Use**

Panel Discussions: curricular areas	
Plays: presentations, story interpretations, childmade, round robin	
Brainstorming: "how- many uses?" "how- many names," etc.	
Reports: oral	
Questions/answer: all curricular areas	
Interview techniques:	reading assignments, social studies
Lectures: all curricular areas	
Music:	interpretations, listening assignments
Student groupings:	aiding other students in oral assignments class teaching
Piano: all curricular areas	
Language-master: all curricular areas	
Rhythms: spelling, games	arithmetic, motor activities

**STYLES OF LEARNING AND
BEHAVIORAL OBJECTIVES**

The process of learning as it relates to the young child has been discussed in terms of main developmental areas (cognitive, motor, language, social, self help), sensory modes and learning styles. In addition, the development of a child can be conceptualized as occurring within three main domains: the Cognitive, the Psychomotor, and the Affective. This is another perspective of the learning process that can serve as a reinforcement and further clarification of the material previously presented.

Behavioral objectives must be developed before the teacher considers how he/she will teach *whatever*. Objectives can be categorized into three major areas—the cognitive, the psychomotor and the affective domains. Understanding these areas leads logically to attention to levels of learning and behavioral output.

The Cognitive Domain

Benjamin Bloom and Associates in *Taxonomy of Educational Objectives* have organized intellectual behavior into a hierarchy which enables teachers to identify cognitive behaviors; thus organizing objectives into the type of cognitive behaviors which can be elicited from a learner. The

taxonomy proceeds from simple knowledge to higher levels of complex mental activity.

These categories are:

1. **Knowledge:** The memorization (without evidence of understanding) of information. Ability to recall or repeat information presented earlier.

Examples: Statement of — facts, terms, definitions, ways of doing something, theories, etc.

Learner Task: Recitation of "The Pledge of Allegiance"

2. **Comprehension:** The lowest level of understanding characterized by the ability to extrapolate, identify relationships and interpret information into a meaningful form in one's own terms.

Examples: Paraphrasing, making inferences, translating, implying, etc.

Learner Task: Translation of a paragraph written in French to English.

3. **Application:** The ability to apply appropriate techniques for problem solving in unfamiliar situation.

Examples: Applying rules, principles, skills.

Learner Task: Predicting the outcome of the rate of growth of a _____ (horse) within a one year period.

4. **Analysis:** The ability to identify relationships, components and principles distinguishing the component parts. The separation of a complex whole into various parts for a comparison or relation to those parts.

Examples: Distinguishing fact from opinion, relevant and irrelevant, comparisons.

Learner Task: Comparing the way each motor is made on two different models of Fords.

5. **Synthesis:** The ability to combine separate elements of knowledge and form a new and unique pattern or whole.

Examples: Applying knowledge or skill or produce an original product; making an original communication, hypothesis or theory. Creating uses for something.

Learner Task: Taking a set of data, proposing an original hypothesis, testing the hypothesis based on test results, modifying the hypothesis (using the chemicals sodium/hydrogen and chlorine).

6. **Evaluation:** The ability to make judgments about the value of an object or idea; form criteria, evaluate, detect fallacies.

Examples: Opposing arguments, assessing the accuracy of something, estimating the worth of, arguing the value of, judging the efficiency of something.

Learner Task: Giving the pros and cons or assessing the efficacy of using laetril in the treatment of cancer, then evaluating the arguments.

General Instructional Objectives — Cognitive (Based on Bloom's Taxonomy of Educational Objectives)

Knowledge.

Defines Common Terms

Describes Basic Concepts

Identifies Methods

Labels Specific Parts

Lists Basic Procedures

Matches Terms with Definitions

Names Each Component

Outlines Specific Procedure

Reproduces Basic Design

Selects Appropriate Color

States General Principle

Comprehension

Converts Table of Measurement

Distinguishes between Fact and Opinion

Estimates Amount of Money

Explains Specific Reasons

Gives Examples of Principles

Interprets Charts, Graphs

Justifies Methods and Procedures

Predicts Future Consequences

Rewrites Written Material

Summarizes Verbal Material

Translates Languages

Application

Applies Concepts, Theories to New Situations

Computes and Solves Mathematical Problems

Constructs Charts and Graphs

Demonstrates Correct Use of Specific Procedure

Manipulates Procedures to Produce Changes

Modifies Formulas to Produce Desired Results

Operates Object Based on Previous Information

Predicts Outcomes of Tests

Prepares Overviews

Analysis

Analyzes Organizational Structure
of a Work (Art, Music)

Diagrams Basic Concepts

Differentiates Logic in Reasoning

Discriminates Facts from Inferences

Identifies Unstated Assumptions

Illustrates Relevant Components

Outlines Specific Components

Points Out Relevant Features

Separates Irrelevant Data

Subdivides into Component Parts

Synthesis

Categorizes Ideas, Concepts, Theories

Composes Speech, Art Work

Creates — Music, Poems, Stories

Designs Plan for Scrutiny

Formulates New Schemas, Events

Generates Creative Ideas
 Integrates Learning from Different Areas
 into a Specific Plan
 Modifies Existing Ideas, Events
 Proposes Various Plans for Experiments
 Reorganizes — Plans, Areas
 Revises Rules, Ideas, Plans
 Summarizes Pertinent Features
 of Ideas, Plans, Theories

Evaluation

Appraises the Value of a Concept, Idea, Fact, etc.
 Compares/Contrasts — the Adequacy of
 an Idea, Theory, Plan, etc.
 Criticizes the Efficacy of a Report, Idea, Plan, etc.
 Evaluates the Value of a Work of Art, Music, Writing
 Judges the Logic of an Idea, Event, Plan, Theory, etc.
 Justifies the Value of an Idea, Plan, etc.

Levels of Using Verbs

Verbs used in objectives can be used as a classification technique (under various headings) in the cognitive domain:

Knowledge

Arrange
 Copy
 Define
 Label
 List
 Locate
 Match
 Memorize
 Name
 Order
 Place
 Press
 Quote
 Recall
 Recite
 Recognize
 Repeat
 Say
 Select
 State
 Tell

Analysis

Analyze
 Appraise
 Calculate
 Categorize
 Compare
 Contrast
 Criticize
 Detect
 Diagnose
 Diagram
 Differentiate
 Discriminate
 Examine
 Experiment
 Identify
 Question
 Resolve
 Test

Comprehension

Classify
 Choose
 Describe
 Discuss
 Explain
 Express
 Identify
 Indicate
 Locate
 Organize

Synthesis

Arrange
 Assemble
 Compose
 Create
 Design
 Devise
 Formulate
 Invent
 Manage
 Modify

Comprehension (cont.)

Pick Out
 Recognize
 Reorganize
 Report
 Restate
 Review
 Select
 Tell
 Translate

Synthesis (cont.)

Organize
 Originate
 Plan
 Prepare
 Produce
 Propose
 Set Up
 Verify
 Write

Application

Apply
 Calculate
 Choose
 Combine
 Construct
 Demonstrate
 Dramatize
 Estimate
 Figure
 Find
 Illustrate
 Interpret
 Operate
 Practice
 Schedule
 Sketch
 Solve
 Use

Evaluation

Appraise
 Argue
 Assess
 Attach
 Choose
 Compare
 Defend
 Estimate
 Evaluate
 Judge
 Predict
 Qualify
 Rate
 Score
 Select
 Support
 Value

The Psychomotor Domain

This domain is an area which has as a focal point the neuromuscular system. It deals with the coordination of skeletal muscles and physical activities requiring performing, constructing, manipulating or any related muscular action believed to ensue from prior conscious mental activity. Physical skills relating to athletics, performing arts, speaking, writing and the manipulation and/or operation of machines are included. Jerrold E. Kemp and others have suggested a grouping for these activities:

1. Gross Bodily Movements

arms
 shoulders
 feet
 legs

Examples: a. throwing a ball
 b. lifting heavy objects
 c. diving in a pool

2. Fine Coordination Movements

hand-finger
 hand-eye
 hand-ear
 hand
 eye
 foot

- Examples: a. crocheting
b. threading a needle
c. typing
d. driving a truck
e. reading music/playing piano

3. Non-verbal Communication

facial expressions
bodily movements/positions
gestures

- Examples: a. painting
b. pantomiming
c. gesturing directions
d. showing facial emotions

4. Speech Behavior

projecting/producing sound
coordinating sound/gestures

The behaviors in the psychomotor area are essential for meeting the objectives of the cognitive domain. These behaviors are readily observable; hence, they can be described and easily measured.

E. J. Simpson has provided a starting point for creating a systematic mechanism (i.e., taxonomy) for categorizing objectives in the psychomotor domain:

Perception is identified as the first step in performing a motor task. This process of becoming aware of objects, qualities, or relations through the sense organs, is the focal point of the situation—interpretation—action chain leading to a motor activity.

Set involves a preparatory adjustment relating to actions, processes, experiences or skills. Identified aspects include physical, mental and emotional dispositions.

Guided Response is characterized as an initial step in the early development of a motor skill. The abilities that are components of the more complex skills are emphasized. The overt behavioral act of one individual under the guidance of another can be defined as a guided response.

Mechanism is an achievement level characterized by confidence and skill in the performance of a task (act). In appropriate situations, the act becomes an habitual part of possible responses to stimuli.

Complex Overt Response is a level of performance characterized by complex motor acts that are carried out with smooth, efficient movement patterns while expending a minimum of energy and time.

The psycho-motor domain, then, can aid teachers in their program planning by viewing movement as an essential area of objective development.

General Instructional Objectives.—Psychomotor

Assembles Specific Model
Builds Tower
Changes Tire Correctly
Cleans Sewing Machine

Composes System

Connects Dots
Constructs Model
Designs Plan by Drawing
Dismantles Model
Draws Accurate Reproduction
Drills One-Inch Hole
Fastens Hooks
Grinds Seeds, Beans
Grips Handles
Manipulates Temperature
Measures Length
Mends Clothing
Mixes Ingredients
Nails Boards
Operates Mower Safely
Paints Furniture
Performs Dance Correctly
Repairs Electric Tool
Sands Board
Scales Wall
Sets Up Equipment
Sews Seam
Sharpens Blades
Sketches Design
Types at 20 Words Per Minute
Weighs Items
Wraps Sandwiches
Writes Legibly

The Affective Domain

The affective domain is that area of behavior which deals with attitudes, values, interests, motives, characterizations, likes and dislikes, appreciations and other emotions.

Affective behaviors are internalized and therefore quite difficult to measure; hence, behaviors that indicate goal accomplishment must be observed.

Bloom, Krathwohl and Masia have developed a hierarchy of objectives in the affective domain, *Taxonomy of Educational Objectives*:

- E. Characterizing by a Value Complex
 - D. Organizing
 - C. Valuing
 - B. Responding
 - A. Receiving

A. Receiving

This is receiving or attending to something, thereby demonstrating awareness of some environmental stimulus which will be given attention and accepted.

Example: Student listens to an announced sale.

Affective Verbs (receiving)

Select
Share
Accept
Accumulate

B. Responding

Reception of stimuli causes an active response which may be voluntary or involuntary. Some form of participation occurs.

- Example: a. Student obeys traffic regulation
b. Student volunteers an answer

Affective Verbs (responding)

Comply
Approve
Volunteer
Discuss
Follow
Seek
Practice

C. Valuing

This action is characterized by a willingness to accept an event, prefer an event and/or be committed to an event through the expression of a positive attitude.

- Example: a. Student aids in planning a party and activities
b. Student contributes clothing to the "Needy Basket"

Affective Verbs (valuing)

Help
Assist
Support
Organize
Argue
Protest
Aid

D. Organizing

The prioritizing of different values, organizing and identifying inter-relationships. New values may be the outcome.

- Example: a. Student saves money for something special rather than buy ice cream or go to a movie
b. Student makes judgments about his responsibilities at home

Affective Verbs (organizing)

Organize
Determine
Compare
Develop
Define
Formulate

E. Characterization by a Value Complex

This level is characterized by consistent actions in accordance with beliefs/values which affect total behavior and become a part of the total personality.

- Example: a. Student continues to be actively involved with scouting
b. Student refuses to try techniques which have proven limitations for him/her

Affective Verbs (characterization)

Continue
Revise
Change
Accept
Resist
Avoid

These five areas are difficult to assess and should be refined in order to find indicator tasks to identify the behaviors.

General Instructional Objectives — Affective (Based on Krathwohl's *Taxonomy of Behavioral Objectives*)

Receiving

Accepts Differences in Viewpoints
Asks Questions Concerning Idea, Object, etc.
Attends to Specific Activity
Chooses Specific Item
Follows Instructions
Listens Attentively
Points to Pertinent Features
Replies to Requests
Selects Appropriate Item, Activity, etc.
Shows Awareness of Object, Idea, etc.

Responding

Assists in Performing Activity
Complies with Requests for Participation
Conforms to Rules, Standards
Greets and Shows Interest in People, Ideas, Objects
Obeys Rules
Participates in Discussions
Practices Skills
Volunteers for Special Activities

Valuing

Completes Specific Assignments
Demonstrates Appreciation for Literature, Art, Music, Drama
Demonstrates Beliefs in Ideas
Follows Examples, Ideas
Forms Strategies to Improve
Initiates Program Activities
Reports Specific Ideas
Proposes Specific Solutions
Shares Specific Ideas
Shows Concern by Proposing Alternatives
Shows Concern for Others
Studies Using Problem-Solving Attitude

Organization

Accepts Responsibility for Behavior
Adheres to Specific Teachings
Arranges Plans for Expression of Abilities, Beliefs, Interests
Balances Freedom and Responsibilities

Combines Plans Systematically
Formulates Plans, Ideas, etc.
Generalizes by Accepting Strengths and Weaknesses
Integrates Teachings
Modifies Behavior to Conform
Organizes Approaches to Solve Problems
Prepares For and Accepts Responsibility
Synthesizes Ideas into Workable Activities
Characterization by a Value or Value Complex
Displays Independence and Self-Reliance
Displays Safety Habits
Influences Others to Engage in "Good" Habits

Maintains Good Citizenship
Performs Safety Conscious Activities
Practices Punctuality, Industry, Self-Discipline
Proposes Cooperation in Activities
Questions and Maintains Objective Approaches
Use Objectivity in Solving Problems
Verifies Answers

Each domain is related in that objectives will involve more than one domain. Successful programming in the cognitive and/or psychomotor areas must consider attitudinal development in order to successfully implement individualized educational programs.

MANAGEMENT/BEHAVIOR

Programming is a process of gearing the curriculum, instruction and interactions to meet needs, interests, and abilities of individual pupils. The most important objective of programming is to release the potential in the individual learner. Specific planning for each child would include:

- an assessment and considerations of the cognitive, social, psycho-motor, and emotional needs;
- consideration of learning styles and performance levels;
- the fostering of positive self-concepts;
- provision for physical constraints;
- materials and equipment to be used;
- evaluation strategies to be used;
- opportunities for individual interests/pursuits;
- consideration of the uniqueness of perceptions, values, concepts and sensitivity to needs;
- a variety of strategies for achieving individual/specific objectives;
- organizational strategies to enhance individuality.

Preparation procedures for implementing a program would involve the combining of humanistic approaches with competent strategies to include:

- the ability to identify interrelated elements of normal child growth and development;
- the recognition of teacher attitudes as important variables for pupil success;
- the ability to identify goals and objectives from appropriate assessment actions;
- skills in assessment and programming;
- skill in use of task-analysis;
- skill in planning for a variety of abilities and disabilities:
 - verbal
 - non-verbal
 - learning disabilities
 - other (non-categorical) groups
 - mobile-immobile
- skill in organizing
- skill in managing the curriculum for various developmental levels
- the ability to prescribe motivational strategies that enhance self-discipline

- the ability to prepare/use multi-level, multi-modal, multi-sensory assignments/materials
- skill in using record-keeping techniques
- skill in constructing learning stations, packets, projects, contracts, and other individualized assignments
- strategies for parental program involvement
- classroom mainstreaming techniques
- skill in providing and using various disciplinary models and techniques
- techniques in using tutors and other multi-age assistance
- skill in providing a variety of resources in program development (neighborhood, field trips, home projects, etc.)
- a thorough understanding of the psycho-social implications involved in teaching and learning approaches (affective domain-attitudes, emotions)
- skill in formally and informally assessing students and incorporating this skill into programming
- skill in the use of flexible grouping patterns
- provisions for independent home-based tasks and study
- skill in the preparation and use of evaluative strategies for assessment of the IEP;
- skill in developing teacher-made materials including:
 - pupil contracts
 - specialized projects
 - educational games
 - learning stations/centers
 - learning packages
 - programmed packages
 - individualized home/school assignments
- skill in the use of parents in the implementation of the IEP
- skill in providing a milieu which is conducive to learning

CLASSROOM MANAGEMENT GLOSSARY OF TERMS

- 1 *Aberration* — A departure from the normal or typical.
- 2 *Aggression* — Hostile actions that cause fear or flight.

- or that failing, brings the aggressor into forceful contact.
3. *Anticipation* — The noting of types of stimuli, behaviors that cause behavioral changes; the behavioral set for specific change.
 4. *Antiseptic Bouncing* — The removal or restraining of a child by allowing him to "save face" with classmates and sparing the teacher the problem of dealing with the behavior. The child is removed from the class by a counselor, social worker, etc.
 5. *Approximate* — To come close to or nearly correct or exact.
 6. *Avoidance* — The presenting of aversive conditions as a consequence of the child's learning to avoid a situation. The situation to be avoided is presented or paired with an aversive condition.
 7. *Behavior Modification* — A change in behavior elicited by reducing aversive behaviors.
 8. *Cognitive Dissonance* — Inconsistent or contradictory cognitions which exist simultaneously for a person, unclear perceptions usually result.
 9. *Compensation* — Devotion to a pursuit with increased vigor to make up for feelings of inadequacy (real or imagined).
 10. *Conflict* — Simultaneous functioning of opposing or mutually exclusive impulses, desire or tendencies.
 11. *Conversion* — The expression of emotional conflicts through muscular, sensory or bodily symptoms of disability, malfunctioning or pain.
 12. *Counteraction Need* — A need, following failure, to strive again and to overcome weakness.
 13. *Counting* — A time limit, wherein expected responses are recorded.
 14. *Cueing* — Aiding a child to remember to perform a specific act, at a specific time by a systematically reminding before the action takes place (rather than after an incorrect response).
 15. *Defense Reaction* — Any activity, thought or feeling designed to close out awareness of an unpleasant act; arousing fact; or anything that threatens self-esteem.
 16. *Discrimination* — Helping a child differentiate one correct behavior rather than another (under certain conditions).
 17. *Displacement* — A substitute activity (differing) resorted to when the usual response to a situation is blocked or prevented.
 18. *Diversion* — Distracting the child from objectionable pursuits by directing his attention toward more desirable activities.
 19. *Dynamism* — A persisting or enduring mode of behavior that brings (temporarily) satisfaction or relief of tension.
 20. *Extinction* — Stopping an aversive action or behavior by arranging unrewarding conditions; hence, the child receives no reinforcement.
 21. *Fear Reduction* — Gradual exposure to a feared stimulus or situation is presented to the child to increase acceptance while the child is comfortable and secure.
 22. *Frustration Tolerance* — The ability to deal with difficulties thereby achieving goals in the face of obstacles without giving up.
 23. *Hurdle-Help* — Relieving frustration and anxiety of a child to help him/her solve a problem; misbehavior is not the focus.
 24. *Hypodermic Affection* — A sudden additional quantity of affection which a child not necessarily warranted but may aid in controlling an outburst.
 25. *Incompatible Alternative* — Alleviating a behavior by rewarding an alternative behavior that is inconsistent with the desired behavior or which cannot be performed at the same time as the undesired behavior (i.e., making a child (who litters) the captain of the cleanup committee).
 26. *Interest Boosting* — A technique of showing interest in a task the child is performing in order to renew interest and cause completion of the task.
 27. *Intermittent Reinforcement* — The gradual or decreased frequency of rewarding a correct behavior. The child is encouraged to continue the desired behavior with few or no rewards.
 28. *Internalization* — The adoption of an attitude as one's own.
 29. *Modeling* — Allowing a child to observe the performance of a desired behavior in order that the child will be able to perform the observed activity.
 30. *Negative Reinforcement* — Alleviating a behavior by arranging a way to terminate a mild aversive situation immediately by improving the behavior.
 31. *Operant Learning* — A form of learning wherein the organism becomes progressively more likely to respond in a given situation with the response which, in similar situations, has brought about a satisfaction.
 32. *Other-Directed Person* — One who wishes to be loved and esteemed by others.
 33. *Physical Restraint* — Should not imply physical punishment; removing a child from aversive involvement; holding a child in temper outburst; seizing a child to remove a dangerous article. The teacher's actions are protective rather than counteraggressive.
 34. *Planned Ignoring* — A conscious, intentional ignoring of a behavior to diminish the frequency of the behavior.
 35. *Positive Reinforcement* — The rewarding of a behavioral performance in order to improve or increase the likelihood of recurrence of the behavior.
 36. *Regrouping* — The removal of a child from one setting to a more manageable setting.
 37. *Proximity Control* — Controlling children's impulses by direct movement close to the child, touching in a friendly manner.
 38. *Restructuring* — The changing of an activity when there is an obvious lack of interest, restlessness, etc.
 39. *Satiation* — Alleviating a behavior by allowing a child

to continue (or insist on his continuing) an undesirable behavior until he tires of it.

40. *Self-Actualization* — The processes of developing one's capacities and talents
41. *Signal Interference* — A preventive measure characterized by cues from the teacher to a child (e.g., stare, tapping, pointing) in order to help a child gain control.
42. *Substitution* — (operant conditioning) The reinforcement of a previously ineffective reward by pairing it (presenting) in close proximity before or after presenting an effective reward.
43. *Successive Approximation* — The teaching of an unfamiliar skill or behavior and rewarding successive steps toward the final behavior.

PRINCIPLES OF BEHAVIOR

The following information might be used in planning an effective management program.

Development of Behavior

- *Successive Approximation* — The teaching of an unfamiliar skill or behavior and rewarding successive steps toward the final behavior.
- *Modeling* — Allowing a child to observe the performance of a desired behavior in order that the child will be able to perform the observed activity.
- *Cueing* — Aiding a child to remember to perform a specific act, at a specific time by a systematically reminding before the action takes place (rather than after an incorrect response).
- *Discrimination* — Helping a child differentiate one correct behavior rather than another (under certain conditions). Correct appropriate responses are rewarded.

Strengthening Behavior

- *Positive Reinforcement* — The rewarding of a behavioral performance in order to improve or increase the likelihood of recurrence of the behavior.

Maintenance of Behavior

- *Substitution* — (operant conditioning) The reinforcement of a previously ineffective reward by pairing it (presenting) in close proximity before or after presenting an effective reward.
- *Intermittent Reinforcement* — The gradual or decreased frequency of rewarding a correct behavior. The child is encouraged to continue the desired behavior with few or no rewards.

Modification of Behavior

- *Avoidance* — The presenting of aversive conditions as a consequence of the child's learning to avoid a situation. The situation to be avoided is presented or paired with an aversive condition.

- *Fear Reduction* — Gradual exposure to a feared stimulus or situation is presented to the child to increase acceptance while the child is comfortable and secure.

Alleviation of Inappropriate Behavior

- *Satiation* — Alleviating a behavior by allowing a child to continue (or insist on his continuing) an undesirable behavior until he tires of it.
- *Extinction* — Stopping an aversive action or behavior by arranging unrewarding conditions; hence, the child receives no reinforcement.
- *Incompatible Alternative* — Alleviating a behavior by rewarding an alternative behavior that is inconsistent with the desired behavior or which cannot be performed at the same time as the undesired behavior (i.e., making a child (who litters) the captain of the cleanup committee).
- *Negative Reinforcement* — Alleviating a behavior by arranging a way to terminate a mild aversive situation immediately by improving the behavior.

Special Management Techniques for Teachers

Humor

To really surprise students, try using a little humor. The teacher's response is usually incompatible with expectations. This humanistic gesture can relieve pressure and show teacher security.

Tape Recorder

Record yourself and analyze the tape on your way home. Being cognizant of your verbal interactive style can lead to improvements.

Grandma's Rule

Many behaviors in which a child will engage can be used to reinforce those behaviors in which he will not readily engage. The teacher must require the less preferred activity before the more preferred activity is allowed (must eat your spinach before dessert).

Silence/Non-verbal Cues

Don't let silence frighten you. This can be a powerful tool toward getting attending behavior. Other techniques include:

- placing fingers to lips
- looking at watch
- holding chin in hands
- staring, looking intently
- tapping foot, finger, pencil
- turning away from class
- folding arms
- placing hands on hips
- shifting weight
- snapping, clapping
- cutting off lights
- biting lips
- stopping abruptly and staring

- looking at floor
- directing with finger

Ignoring

Behavior that is not reinforced or rewarded will usually diminish.

Removing Seductive Objects

This is a preventive measure. Objects that precipitate aversive behaviors should be placed "out of sight, out of mind."

Routines

All classrooms need structure. The amount is dependent upon the type of behaviors the children possess. Security is needed by many children and can be provided by the establishing of routine activities.

Cueing

This technique is a signal from the teacher to the child to help the child's control. This technique can be used to allow students time to prepare for questions or other contributions.

Diversion

This technique is designed to distract students from objectionable behavior and directing attention to desirable actions/activities.

Subtle Intervention

Many times teachers overreact to many forms of misbehavior. Drastic measures are sometimes taken when a cold stare would suffice. The goal is to aid the student to become more self-directed and to be responsible for his/her own behavior.

Redl's Life-Space Interview Techniques

These techniques give situational assistance or "on-the-spot" first-aid attention to misbehavior. The teacher assists by manipulating environmental barriers which thwart pupil progress.

Counting Time

Set limits by expecting certain behavioral responses. If you don't get the desired response (without adding an "or else"), look at your watch, clock and say I will take the amount of time from you that you are taking from me. (This technique should be explained before a situation arises wherein it is used.)

Peer Pressure

Setting class and individual standards will allow classmates to aid in disciplining themselves and others. This technique should not be used in a hostile manner.

Removal to Reduce Anxiety

Having a child go to the lavatory and put cold water on his face can help calm him/her and allow the situation to normalize. Be certain that removals do not destroy rapport or self-concept.

Giving Permission

Openly "permitting" a behavior sometimes allows the behavior to become ineffective and children's interests are

lost. If a child wishes to use profanity, tell him/her it is fine but it must be done in places where no one can hear it (except the child).

General Tidbits

1. Try to understand why a child behaves in a certain manner.
2. Vary the levels of interest during lessons.
3. Try to empathize rather than criticize unnecessarily.
4. Learn behaviors that are age-appropriate.
5. Find something positive to say about a child that usually gets your negative remarks.
6. Use interest inventories in order to meet specific needs.
7. Use field trips as learning experiences rather than as a reward for the "good" children.
8. Allow the class to aid with discipline rather than try to handle all of the discipline yourself.
9. Try to be humanistic in your approaches.
10. Remember, if lessons are not interesting, children will find something else to bring stimulation.
11. Don't be afraid to have class standards; the children can help set them.
12. Send a note home when the child has done something positive. Parents appreciate the gesture and the child will be exceptionally happy that he is reinforced for acting or doing something acceptable.
13. Constantly evaluate and reevaluate your methods, strategies, and techniques; never be afraid to change if something is not working.
14. Learn to enjoy the children in order not to think of teaching as drudgery.
15. Use incomplete stories or situations whereby the message you wish stressed is incorporated. The children can supply the best ending.
16. Use pictures showing good and bad situations. The children can react in small group or class situations.
17. Role playing of easy and difficult situations that children must confront in the classroom, lunchroom, playground, halls, etc., can be helpful in changing behavior.
18. Camera shots of good behaviors exhibited appropriately can be helpful.
19. Taping good things someone said about another can help build self-concept.
20. Glasser's circles and other techniques can help children have a responsibility to the group.
21. Set the kind of example you wish the children to model. You can say that the children should treat you as you treat them.

STEPS TO DEVELOPING DESIRED BEHAVIOR

1. Define the behavior in observable/measurable terms.
2. Determine your objective for change.

3. Decide how you will evaluate and record behavioral changes and teacher attempts to modify the behavior.
4. Determine observation and recording length, time, etc.
5. Gather baseline data in order to show change.
6. Identify motivators and reinforcers for the child.
7. Decide what the reinforcement schedule will be.
8. Structure the environment for success.
9. Begin your program/procedure.
10. Count and record progress.
11. Chart the progress.
12. Review, evaluate and make the necessary revisions.
13. Maintain the achieved behavior with intermittent reinforcement and the use of intangible rewards (i.e., praise, smile, hug, etc.).

REINFORCEMENT FOR BEHAVIOR

Social Reinforcers

Praise:

Good
That's right
Excellent
That's interesting
Thank you
I'm pleased
Exactly
Good job
Good thinking
That's clever
I like that
Great
Good for you
Not bad
Super
Fantastic
Fine
Marvelous
Perfect
Congratulations
That was first class work!
You really pay attention!
That shows a great deal of work!
Now you have the hang of it!
You did a lot of work today!
That's quite an improvement!
I'm very proud of you today!
Nothing can stop you now!
You should show this to your father!
Show Grandmom your picture!
You really outdid yourself today!
I'm happy to see you working like that!
Boy, your brain is in high gear today!
You're working beautifully today!

Expressions:

Smiling
Winking
Nodding
Laughing
Clapping
Blowing Kisses

Contact:

Touching
Hugging
Hold hand
Sitting in lap
Shaking hand
Patting head/shoulder
Walking together
Sitting together
Eating together
Playing games
Sharing
Touching elbows

Activity Reinforcers:

Games
Trips
Messengers
Goody Bags
Grab Bags
Pinatas
Answering Telephone
Cleaning Blackboard
Listening to Records
Extra Playground Time
Making Bulletin Boards
Caring for AV Equipment

Collecting Cookie Money
Looking for Filmstrips
Helping Custodian
Sitting with Friend
Working in Special Spot
Helping a Friend
Free Time
Knitting
Leading Games
Crocheting
Taking Attendance
Caring for Plants
Caring for Animals

Token Reinforcers:

Certificates
Points
Stars
Stamps
Happy Notes
Chips
Coins
Special Colors
Name Pins
Desk Signs
Buttons
Blue Ribbons

AN AID TO "CHANGING" BEHAVIOR

In order to modify behavior and find alternatives to threats, yells, "punishment," "medication," exclusion and occasional jerks, the teacher will have to observe the behavior to be altered.

a. Observed behavior

2. When behavior occurs (and how often)

3. (Seeming) reinforcer

4. Initial reaction to behavior

5. Positive reinforcement to be used

(a) _____

(b) _____

(c) _____

Date	Teacher Behavior (Reinforcement)	Child Behavior
	(nod, smile, gave token, other)	
	1. _____	_____
	_____	_____
	2. _____	_____
	_____	_____
	3. _____	_____
	_____	_____
	4. _____	_____
	_____	_____
	_____	_____

Behaviors Causing a Loss of Control

Child Behavior	Event Causing Loss of Control	Alternatives

CHARTING BEHAVIOR

Description of behavior: _____

[illegible]

GENERAL CLASSROOM MANAGEMENT TIPS

Things to Think About

Think about:

- what you say when you think a child has been "disrespectful" to you (yelling, smart alecky, etc.).
- how you handle people who "pick" on other children (call names, hit, talk about, etc.).
- what you say or how you handle a child who gets out of his seat at inappropriate times.
- how you react and what you say when children refuse to do their work.
- what you do or say to children who are unfriendly and/or disrespectful to others.
- how you handle children who are unacceptable to classmates because of body odor or unclean clothes; how is the class handled?
- what you do when you realize you have falsely accused a child.
- what you do or say when you suspect a child has stolen something.
- how you handle your class members who have been disrespectful to another teacher, custodian, principal, etc.
- what you say, how you react when your class has "really been super."
- the kinds of reward systems operating in your classroom.
- the kinds of negative reinforcement tactics employed and their effectiveness.
- how you introduce a child with a specific exceptional-ity.
- how you handle children who laugh at, tease, etc. those with specific exceptionalities.
- how you model the "self" you wish the class to emulate.

Things Teachers Do

to Make Children Feel Like Somebodies

- A. Trying to understand why the child acts as he does
- B. Having empathy for child and problems
- C. Positive teacher talk
- D. Knowing children's characteristics individually and group
- E. Pointing up positive things about children rather than dwelling on the negative
- F. Study children first, then vary methods to suit child
- G. More humanistic
- H. More innovative in presentation to motivate children
- I. Use interest inventories and sociograms
- J. Plan leadership and followship activities for children
- K. Take children on trips, to exhibits, etc.
- L. Visit child's home
- M. Praise child for accomplishments — no matter how small
- N. Know when to refer child to proper person or agency when teacher is unable to handle problem
- O. Consider varying interests when planning school program
- P. Wise use of conferences to help child
- Q. Let's talk it over sessions
- R. Set class standards; revise if necessary
- S. Have pupils write about situation and find possible solutions
- T. Re-evaluate attitudes, teacher methods, techniques, etc.
- U. Give children a role in decision-making and standard-setting
- V. Use all available resources, human or otherwise, to help the child
- W. Have fun with children

OBSERVATION CHECK LIST FOR TESTING AND RECOMMENDATIONS

Name _____ Date _____ Grade _____

Repeat Grade _____

Behavior and Attitudes

- ☐ cooperative
- ☐ attentive
- ☐ consistent
- ☐ inconsistent
- ☐ distractible
- ☐ talkative
- ☐ can't sit still
- ☐ tapping
- ☐ clumsy gait
- ☐ jerky movements
- ☐ tries to cooperate
- ☐ friendly
- ☐ polite
- ☐ responsive
- ☐ enthusiastic
- ☐ sense of humor
- ☐ alert
- ☐ confident
- ☐ persevering
- ☐ works close to paper
- ☐ works far from paper
- ☐ difficulty following directions
- ☐ asks for repetitions
- ☐ minimal verbal responses
- ☐ right-handed
- ☐ left-handed
- ☐ sullen
- ☐ no eye-to-eye contact
- ☐ uncomfortable
- ☐ tense
- ☐ unsure
- ☐ withdrawn
- ☐ shy
- ☐ reserved
- ☐ cautious
- ☐ easily embarrassed
- ☐ quiet
- ☐ appears bored
- ☐ rude
- ☐ silly
- ☐ tires easily
- ☐ yawns frequently
- ☐ clock-watcher
- ☐ sniffles
- ☐ frequently clears throat

Educational Considerations

Grasp of pencil:

- ☐ tense
- ☐ awkward

Oral reading:

- ☐ accuracy
- ☐ recall
- ☐ fluency

Spelling:

- ☐ visual memory
- ☐ patterns
- ☐ sequencing syllables

Writing:

- ☐ manuscript
- ☐ cursive
- ☐ listening skills
- ☐ grasp and manipulation of pencil

Alphabet:

- ☐ forms
- ☐ names
- ☐ sounds
- ☐ eye examination
- ☐ hearing check
- ☐ basic sight words

Arithmetic:

- ☐ forms
- ☐ names
- ☐ amounts
- ☐ number facts
- ☐ number sequence

Work attack skills:

- ☐ phonics
- ☐ contextual clues
- ☐ structural analysis

Silent reading:

- ☐ word recognition and meaning
- ☐ comprehension of longer units of thoughts
- ☐ main ideas
- ☐ details

Speech:

- ☐ indistinct
- ☐ slow

Vocabulary development _____

Some additional, selected references are:

Bakker, Piet. "Ciske, the Rat." In *Conflict in the Classroom*. Long, Morse, and Newman. Belmont, Ca.: Wadsworth Pub. Co., Inc., 1971.

Brown, George I. *Human Teaching for Human Learning*. Viking Press, 1971.

Driekurs, Rudolf; Grunwald, Bernice B.; and Pepper, Floyd C. *Maintaining Sanity in the Classroom: Illustrated Teaching, Teaching Techniques*. New York: Harper and Row, 1971.

Fagen, Stanley; Long, Nicholas J.; and Stevens, Donald J. *Teaching Children Self-Control*. Columbus, Ohio: Charles E. Merrill Publishing Co., 1975.

Hawley, Robert C. and Hawley, Isabel L. *A Handbook of Personal Growth Activities for Classroom Use*. Amherst, Mass.: Education Research Associates, 1972.

Klein, Roger D. *Behavior Modification in Educational Settings*. Springfield: Charles C. Scott, 1973.

Krumboltz, Helen Brandhorst and Krumboltz, John D. *Changing Children's Behavior*. Prentice-Hall, 1972.

Lyon, Harold C., Jr. *Learning to Feel—Feeling to Learn*. Columbus, Ohio: Charles E. Merrill Publishing Co., 1971.

Offer, Daniel. *The Psychological World of the Teenager: A Study of Normal Adolescent Boys*. New York: Basic Books, 1969, pp. 193-224.

Pfeiffer, William and Jones, John E. *A Handbook of Structured Experiences for Human Relations Training* (vols. 1, 2, 3) Iowa City, Iowa: University Associates Press, 1974.

Raths, L.; Harmin, M.; and Simon, S. *Values and Teaching: Working with Values in the Classroom*. Columbus, Ohio: Merrill, 1966.

Redl, Fritz. "The Concept of the Life Space Interview." In *Conflict in the Classroom*. Long, Morse, and Newman: Wadsworth Pub. Co., 1976.

Simon, Sidney B.; Howe, Leland W.; Kirshenbaum, Howard. *Values Clarification: A Handbook of Practical Strategies for Teachers and Students*. New York: Hart Publishing Co., 1972.

APPENDIX D

PARENT INPUT IN THE I.E.P. PROCESS

Parents are expected to attend and participate in the development of the individualized educational program. It must be a shared responsibility (parents and educators) for implementing, maintaining and evaluating efforts of the school and the home. This sharing might begin with involvement in:

- IEP meeting
- classroom visits
- participation in parent/teacher meetings and organizations
- reinforcement of skills areas
- identification of legal aid
- telephone information services
- volunteer services to the school
- goal reinforcement
- parent training program
- advisory groups
- action projects
- classroom assistance
- provision of material resources within communities
- parent libraries
- parent newsletters
- information gathering techniques

Specific aid can be given by having parents:

1. Talk to children (in quiet friendly voices) about positive school activities.
2. Listen attentively when the child is sharing with the parent.
3. Speak clearly using gesture and simple sentences to provide a good model for the child.
4. Reinforce and reward the child for his efforts and attempts.
5. Encourage language development through songs, games, rhymes, stories, make-believe, puppet shows, other activities.
6. Play listening and reading games.
7. Talk about shapes, size, colors and directions when conversing with the child.
8. Allow the child the freedom of expression rather than anticipating his/her needs.
9. Use rhythmic activities to encourage speech and change activities.
10. Allow for fine motor development within the home setting.
11. Aid reinforcement by supplementing praise and other methods.
12. Aid in development of specific children by learning sequential developmental levels.
13. List motivators that can add to teacher effectiveness.
14. Use household items to reinforce specific skills (e.g., clothespins, paper bags, boxes, spools, plastic containers, sponges, vegetables, tops, etc.)
15. Encourage the use of high expectancy for motivation and building self-esteem.
16. Respond emphatically, openly and with respect to children.
17. Document, chart and record progress in order to evaluate efforts.
18. Visit museums, public buildings, theatres, etc., to reinforce skills.
19. Correlate the school program with reinforcement techniques for home use.
20. Utilize household items or develop homemade materials for specific goals and objectives.
21. Plan learning activities that are age-appropriate rather than developmentally matched to the chronological age.
22. Minimize hazards that may occur while promoting independence.
23. Use regular activities to reinforce or teach (dressing, mealtimes, etc.).
24. Study the exceptional condition of the child in order to assess its impact on the development of the child and the effect on learning.
25. Utilize community resources that will accommodate some aspect of the child's impairment.
26. Observe the teacher or other trainers in an activity which can be duplicated and reinforced independently.

27. Utilize programs that promote early intervention strategies and techniques.
28. Learn management skills that lead to independence rather than dependence on family members.
29. Accept the limitations but encourage the child and build his confidence.
30. Request the aid of outside reading materials that will help render understanding.
31. Routinize your work with the child but allow the child to set the pace of activity.
32. Encourage and strengthen communication even if a child's speech is unclear. Don't always intervene for others, allow the child to try.
33. Allow the child to follow simple direction. Engage in social learning situations.
34. Try to teach the child during periods of relaxation.
35. Have the child's efforts concentrated on limited stimuli when teaching. Avoid a lot of distractions.
36. Learn to role play with the child.
37. Praise even small successes using physical affection and verbal praise.
38. Try using many approaches to help a child learn a skill. Allow the child to touch, taste, and smell things.
39. Change a technique if one way isn't effective.

Teachers Help Parents by:

1. Helping them understand a child's disability as well as his assets;
2. Explain that labels don't always communicate the extent of a disability. A diagnosis may change with multiple testing situations;
3. Explaining the role of parents of exceptional children; engage in problem-solving processes as with normal children;
4. Having parents involved in each step of the IEP process;
5. Writing reports, letters, etc., in clear, concise language; information void of understanding will not be useful;
6. Sharing reports with parents or giving them copies;
7. Helping to formulate a management program that is both realistic and beneficial to parents and child.

EDUCATING EXCEPTIONAL CHILDREN

The following resources might aid teachers and parents in providing a more effective educational plan: (California Regional Resource Center).

1. *A Cup of Kindness: A Book for Parents of Retarded Children*, by Louise Fraser. Seattle, Washington: Special Child Publications, 1973 (\$4.50). Discusses common needs of the retarded child, and home training in areas such as feeding, toileting, grooming. Special problems of retarded blind, deaf, and autistic children

are also included. A list of books appropriate for the retarded child is found in the annotated bibliography:

2. *An Instructional Guide for Parents*, by Lisa Carambia, and others. Duquesne University, Pittsburgh, Pa.: Pennsylvania State Dept. of Education, Harrisburg, 1974. Self-help, communication, physical skill activities for severely and profoundly retarded, and for multiply impaired children.
3. *Auditory Training — Learning the Joy of Listening*, by Elisabeth McDermott. *Volta Review*, 1971, 73 (3), pp. 182-5. Discusses auditory training methods used in schools and presents activities which parents can use at home with a hearing impaired child.
4. *Even Love Is Not Enough . . . Children With Handicaps* from Parents' Magazine Films, Inc., New York, 1975. Five filmstrips, cassette tapes, and study guides: behavioral and emotional disabilities; educational and language disabilities; intellectual disabilities; physical disabilities.
5. *Handling the Young Cerebral Palsied Child at Home*, by Nancie Finnie. New York: E.P. Dutton and Co., 1970. Provides a questionnaire on developmental stages and activity levels and offers suggestions for movement development, carrying, bathing, feeding, etc.
6. *Help Them Grow: A Pictorial Handbook for Parents of Handicapped Children*, by Jane Blumenfeld, Pearl Thompson, Beverly Vogel. Nashville: Abingdon Press, 1971 (\$2.75). Suggestions for teaching basic skills to exceptional children (self-help; social; communication; sensory and motor skills).
7. *Isn't It Time He Outgrew This?*, by V. Baldwin, H.D. Fredericks, and G. Brodsky. Springfield, Illinois: Charles C. Thomas, 1973. Step-by-step methods for teaching self-help skills to young children, and to severely impaired youngsters. Techniques for training both academic and motor skills are also included. This book trains readers in simple methods of recording behavior data.
8. *Methods and Aids for Teaching the Mentally Retarded*, by Patricia Davis. Minneapolis, Minnesota: T.S. Denison, 1970. Practical suggestions, games, and activities related to developing communication skills, number concepts, etc.
9. *On Being The Parent of a Handicapped Youth: A Guide to Enhance the Self-Image of Physically and Learning Disabled Adolescents and Young Adults*, by Sol Gordon. New York, N.Y.: New York Association for Children with Learning Disabilities, 1973.

10. *P.E.T. Parent Effectiveness Training: The Tested New Way to Raise Responsible Children*, by Thomas Gordon. N.Y.: Peter H. Wyden, 1970. Teaches active listening and communication skills—communicating personal feeling and conflict resolution.
11. *Physical Education and Recreation for the Visually Handicapped*, by Charles Buell. AAHPER Publication-Sales, 1201 16th St., N.W., Washington, D.C. 20036 (\$2.95). This is a booklet for parents and teachers describing employment and leisure time activities for visually impaired, and methods of teaching physical activities. An annotated bibliography of publications and organizations concerned with the visually impaired is included.
12. *Practical Advice to Parents: A Guide to Finding Help For Handicapped Children and Youth*, by CLOSER LOOK, (20 pp), Washington, D.C., 1974.
13. *Prescriptions for Learning: A Parent's Guide to Remedial Home Training*, by Robert Valett. Palo Alto: Fearon, 1970. (\$2.75). Designed for parents of children with learning disabilities, this manual provides a series of programs for parents to use in identifying their child's skill level, and suggestions on how to develop, in consultation with the child's teacher, an appropriate training program. Also included are instructions on how to construct learning aids, and information on obtaining educational materials.
14. *Proof of the Pudding*, by Janet Bennett. *Exceptional Parent*, 1974, 4 (3), pp. 7-12. A mother of a retarded child discusses her

child's development and successful integration into a regular class.

15. *Something's Wrong With My Child*, by M. Brutton, S. Richardson, and C. Mangel. New York: Harcourt, Brace, Jovanovich, 1973. This book is subtitled "A Parent Book about Children With Learning Disabilities." The authors offer guidelines for parents interacting with professionals and explanations of special class placement, resource room placement or itinerant teacher assistance are given. Suggestions on how to handle the child at home—using consistent discipline, not favoring siblings, making clear directions and not overstimulating the home environment are included.
16. *The Deaf Child in the Public Schools—A Handbook for Parents of Deaf Children*, by Lee Kata, and others. Danville, Illinois: Interstate Printers and Publishers, Inc., 1974 (\$3.50). Discusses definitions, causes of deafness, and learning problems; types of public school programs; teacher qualifications; integration of deaf children. An annotated listing of public and private organizations serving the deaf is also included.
17. *Training the Retarded at Home or In School*, by Earl E. Balthazar. Palo Alto: Consulting Psychologists Press, 1976. This is a manual for parents, teachers, and home trainers which outlines a systematic training program in fundamental self care skills and basic social coping behaviors. "Schedules" are provided to assist parents or other trainers to find where the child is in his development, and what he should learn next.

APPENDIX E

PUBLISHERS' ADDRESSES

Academic Therapy Publications, Inc.
1539 4th Street
San Rafael, California 94901

Allied Education Council
Distribution Center
P.O. Box 78
Gallen, Michigan 49113

American Association on
Mental Deficiency
5201 Connecticut Avenue, N.W.
Washington, D.C. 20015

American Education
Publications, Inc.
Education Center
Columbus, Ohio 43216

American Foundation for
the Blind, Inc.
15 West 16th Street
New York, New York 10011

American Guidance Service, Inc.
720 Washington Avenue, S.E.
Minneapolis, Minnesota 55414

Arden Press
8331 Alvarado Drive
Huntington Beach, Calif. 92646

Audio Dynamic Research
1219 East 11th Street
Pueblo, Colorado 81001

Barnell Loft Ltd.
111 South Centre Avenue
Rockville Centre, New York 10013

Baush & Lomb, Inc.
Rochester, New York 14602

Beckley-Cardy Company
1900 N. Narragansett Avenue
Chicago, Illinois 60639

Behavioral Controls, Inc.
1506 W. Pierce Street
Milwaukee, Wisconsin 53204

Behavioral Research Laboratories
P.O. Box 577
Palo Alto, California 94302

Benefic Press
(see Beckley-Cardy Company)

Bobbs-Merrill Company, Inc.
4300 West 62nd Street
Indianapolis, Indiana 46268

Bowmar
622 Rodier Drive
Glendale, California 91201

Bremmer-Davis
511 Fourth Street
Wilmette, Illinois 60091

Brigham Young University Press
205 UPB
Provo, Utah 84601

Bureau of Educational Research
and Service
University of Iowa
Iowa City, Iowa 52240

C.P.S., Inc.
P.O. Box 83
Larchmont, New York 10538

CTB/McGraw Hill
Monte Research Park
Monterey, California 93940

Cedars Press Incorporated
P.O. Box 351
Columbus, Ohio 43229

Chandler Publishing Company
124 Spear Street
San Francisco, California 94105

Childcraft Education Corporation
P.O. Box 98
Bayonne, New Jersey 07002

Childrens Music Center
5373 W. Pico Blvd.
Los Angeles, California 90019

Committee on Diagnostic Reading Tests
Mountain Home, North Carolina 28758

Community Playthings
Rifton, New York 12471

Constructive Playthings
1040 E. 85th Street
Kansas City, Missouri 64131

Consulting Psychologists Press, Inc.
577 College Avenue
Palo Alto, California 94306

Continental Press, Inc.
Elizabethtown, Pennsylvania 17022

Creative Playthings
Princeton, New Jersey 08540

Crippled Children and Adults
of Rhode Island, Inc.
Meeting Street School
333 Grotto Avenue
Providence, Rhode Island 02906

Dalgger & Company
159 West Kinzie Street
Chicago, Illinois 60610

Developmental Learning Materials
7440 Natchez Avenue
Niles, Illinois 60648

Devereau Foundation Press
Devon, Pennsylvania 19333

Economy Company
5811 West Minnesota
Indianapolis, Indiana 46241

Edmark Associates
655 S. Orcas Street
Seattle, Washington 98108

Educational Activities, Inc.
Freeport, New York 11520

Educational Developmental
Laboratories
284 East Pulaski Road
Huntington, New York 11743

Educational Dimensions Corp.
c/o Dale W. Rettinger
Area Manager
2722 Polk Street
San Francisco, California 94109

Education Division/Meredith
Corporation
440 S. Park Avenue, S.
New York, New York 10016

Educational Innovations, Inc.
203 North 4th Street
Carrollton, Illinois 62016

Educational Proformance Associates,
Inc.
563 Westview Avenue
Ridgefield, New Jersey 07657

Educational Projections Corp.
5278 Commerce Street
Jackson, Mississippi 39201

Educational Reading Services
320 Route 17
Mahwah, New Jersey 07430

Educational Record Sales
157 Chambers Street
New York, New York 10007

Educational Teaching Aids
Division of Daigler & Co.
159 West Kinzie Street
Chicago, Illinois 60610

Educational Testing Service
Princeton, New Jersey 08540

Educators Publishing Service
301 Vassar Street
Cambridge, Massachusetts 02139

Electronic Futures, Inc.
57 Dodge Avenue
North Haven, Connecticut 06473

Herbert M. Elkins Company
Tujunga, California 91042

Encyclopedia Britannica
Educational Corporation
425 N. Michigan Avenue
Chicago, Illinois 60611

Enrich Materials
3437 Alma
Palo Alto, California 94306

Essay Press, Inc.
P.O. Box 5
Planetarium Station
New York, New York 10024

Eye Gate House
146-01 Archer Avenue
Jamaica, New York 11435

Fairview State Hospital
Research Department
2501 Harbor Blvd.
Costa Mesa, California 92626

Follett Publishing Co.
1010 West Washington Blvd.
Chicago, Illinois 60607

Ginn & Company
Statler Building
Back Bay
P.O. Box 191
Boston, Massachusetts 02117

Graham-Field Surgical Co., Inc.
415 Second Avenue
New Hyde Park, New York 11040

Grune & Stratton, Inc.
111 Fifth Avenue
New York, New York 10003

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Boston, Massachusetts 02107

Houston Test Company
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Houston, Texas 77035

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Oaklawn, Illinois 60453

Initial Teaching Alphabet
Publishing, Inc.
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New York, New York 10017

Instructional Materials &
Equipment Distributors
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Los Angeles, California 90024

International Reading Association
6 Tyre Avenue
Newark, Delaware 19711

Joseph E. Moore & Associates
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Atlanta, Georgia 30327

Judy Company
Route 2
Center Ridge, Arkansas 72027

Keystone View
2212 East 12th Street
Davenport, Iowa 52803

Kimbo Educational
Box 246
Deal, New Jersey 07723

Ladoca Project & Publishing Foundation
East 51st Avenue
Denver, Colorado 80216

Language Research Associates, Inc.
175 East Delaware Place
Chicago, Illinois 60611

Learning Arts
Box 917
Wichita, Kansas 67201

Learning Corporation of America
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Los Angeles, California 90064

Learning Materials
200 Sylvan Avenue
Englewood Cliffs, New Jersey 07632

J. B. Lippincott Company
East Washington Square
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1 Park Avenue
Old Greenwich, Connecticut 06870

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Affiliate of Meredith Publishing Co.
407 East 25th Street
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McGraw-Hill Book Company
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New York, New York 10036

Macmillan Company
Subsidiary of Crowell, Collier &
Macmillan, Inc.
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New York, New York 10022

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Medical Research Council
Department of Psychological Medicine
Royal Free Hospital
Lawn Road
London N.W., 3, England

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Columbus, Ohio 43216

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Oxford, Ohio 45056

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Company
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Personnel Press
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Phillip & Tacey
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Bronx, New York 10472

Priority Innovations
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New York, New York 10017

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Missoula, Montana 59801

Pumpkinseed
Coldwater Tavern Road
Nassau, New York 12123

Random House, Inc.
457 Madison Avenue
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School of Education
University of Pittsburgh
Pittsburgh, Pennsylvania 15213

Responsive Environments Company
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Scholastic Book Service
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Stanwix House, Inc.
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Hawk Drive
Lloyd Harbor, New York 11743

Teachers College Press
1234 Amsterdam Avenue
New York, New York 10027

Teaching Resources
Educational Service of the New York
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Teaching Technology Corp.
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Visual Needs, Inc.
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Rochester, New York 14614

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Los Angeles, California 90025

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Winter Haven, Florida 33880

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